SECTION VI – PROJECT MANAGEMENT, BUSINESS, AND TECHNICAL REQUIREMENTS

A. INTRODUCTION

The purpose of this section is to present the mandatory business and technical requirements that must be addressed by the proposed solution as described in Section IV – Proposed System and Business Processes. See Section V - Administrative Requirements; Section VIII - Proposal Format; and Section II - Rules Governing Competition, for other requirements that must be met in order to be considered responsive to this RFP.

The California Office of the Secretary of State (SOS) is seeking a Bidder to develop or provide an application to meet the mandatory Help America Vote Act of 2002 (HAVA) requirements. This is a solution-based procurement. It is important to understand that these requirements are intentionally written at a summary level of detail to facilitate an alternative procurement process. The underlying intent of this process is to focus business requirements on the business need ("what must be done"), not on current methods or constraints ("how it is currently done"). SOS has identified the resultant performance criteria but the method of delivery or achievement is optional. SOS recognizes there may be more than one means of meeting the requirements and wants to evaluate alternatives. All Bidders must propose the VoteCal System, and may optionally propose the VoteCal Election Management System (EMS). Requirements for the VoteCal System and VoteCal EMS have been broken out into separate sections for ease of responding to this RFP. No Bidder will be disqualified for not proposing the optional VoteCal EMS. However, the SOS recognizes significant value in providing a fully integrated election management system as a low cost option for counties, now and in the future, that are required to or desire to migrate from their current election management system, and will, therefore, award extra points in the bid evaluation to systems that feature such an option.

B. PROJECT MANAGEMENT ACTIVITIES AND PLANS

To facilitate the Evaluation process, Bidders must complete Exhibit VI.1 – Project Activities and Plans Requirements Response Matrix (a list of requirement numbers and the page number in Bidder's Proposal where the response can be found).

It is SOS's intent to evaluate the Bidder's past level of effort and performance as well as their capability to execute certain tasks successfully. Tasks include:

- System preparation (project planning, tracking, and control);
- · System requirements and gap analysis;
- System design, programming, configuration/modification, integration, and testing;
- Data conversion;
- System implementation;
- Training;
- System maintenance and management, and
- System operation, maintenance, and support.

SOS requires the Bidder to prepare and submit the Bidder's draft Project Management Plan and approach to various project activities. SOS requires that Bidders provide draft plans so that SOS can evaluate the Bidder's ability, application of best business practices, and competence in managing a project of this size and complexity. Such information must be submitted along with the Bidder's response to the other Business and Technical Requirements. Bidders must note that when the project is initiated, for each deliverable that is prepared for the project, a Deliverable Expectations

Document (DED) will be prepared jointly by SOS and the Bidder and approved by the VoteCal Project Manager. Refer to Appendix A, Attachment 1, Statement of Work, Exhibit 2, for further details on the DED.

In drafting the various plans and discussions to satisfy Project Management requirements, Bidder should clearly identify the proposed role of SOS staff. Bidder should be guided by the following principles:

- SOS will serve as the ultimate authority for elections policy and statute.
- SOS will serve as the primary interface and liaison with counties.
- SOS personnel with elections experience and expertise who are dedicated to the project will likely be limited to those persons already assigned to the project team.
- SOS will not be providing ongoing in-county support and training through the deployment phases
 of the project.
- SOS expects Contractor to provide expertise in communications, marketing, organizational change, and training.

Current staff assigned to VoteCal include: Project Manager, Contract Administrator, Program Lead, Communications Lead, and Program Analyst. Additional SOS VoteCal staff are anticipated in the FSR (see Bidders' Library).

Each requirement in this section indicates the elements of that requirement that will be evaluated. Failure to address all elements of each requirement will result in a lower score for that response.

1. Project Management

Requirement P1

The Bidder's Proposal must provide a draft <u>Project Management Plan</u> (PMP) that, when finalized, will become the controlling document for managing the VoteCal Statewide Voter Registration System (VoteCal) and must include activities related to this project for SOS staff as well as Bidder staff resources. The Bidder must use its PMP to define the technical and managerial project functions, activities, tasks, and schedules necessary to satisfy the project requirements. The PMP shall be submitted for SOS review and approval within thirty (30) calendar days of contract award and will provide the "baseline" for the change control process.

The Bidder must identify tasks based on durations, task initiation and completion criteria, relationships and dependencies among tasks, timing, major deliverable milestones, resource allocations, and provide a preliminary GANTT chart. This plan must include a Resource Management component (e.g., roles and responsibilities) during the implementation. In addition to the Bidder staff, the PMP must identify activities for the SOS staff along with the SOS approval points for signoff. The plan must also include times for SOS review of deliverables and necessary correction of deficiencies, as agreed to in the DED, but in no event will be less than five working days. The PMP will be used to track the achievement of project milestones and provide the basis for ongoing project communications.

For schedule planning purposes, Bidder should assume limited availability of SOS staff for the fourteen (14) business days prior to and the seven (7) business days following a statewide election. Bidder should assume unavailability of county staff and a freeze on changes to or testing with county systems during the period beginning 60 days prior to and ending 30 days following a statewide or UDEL election.

Bidders should reference the standard by which their PMP has been defined (e.g., IEEE, PMI, etc.). The Bidder should indicate how often the PMP will be updated.

NOTE: This is a fixed-price contract and the primary assumption is that there will be no change orders. Change orders will only be considered under the terms identified under Statement of Work, 1.7, Unanticipated Tasks or that are the result of State or Federal legislative mandates, or law or regulation changes.

Requirement P2

The Bidder's Proposal must describe their approach to schedule management as a draft <u>Schedule Management Plan</u>, which includes resource updates, tracking of resource activities, milestone progress and reporting, critical path monitoring, schedule issues, status reporting based on work breakdown structure, and contingency activities. The Schedule Management Plan shall be submitted as a component of the Project Management Plan for SOS review and approval within thirty (30) calendar days of contract award.

Requirement P3

The Bidder's Proposal must provide a draft <u>Quality Assurance Plan</u>, which includes a review of all work products and activities during the project, roles and responsibilities for QA activities, quality standards to be used for the project and how quality will be monitored and measured. The Quality Assurance Plan shall be submitted for SOS review and approval within thirty (30) calendar days of contract award.

Requirement P4

The Bidder's Proposal must describe their <u>Software Version Control and System Configuration Management methods</u> to be employed during this project. The Bidder must include a discussion of the methods and tools that will be used for version control and configuration management along with how new modifications and/or modules will be integrated and implemented when software upgrades are required during the warranty/maintenance period. A formal Software Version Control and System Configuration Management Plan shall be submitted to SOS for review and approval within thirty (30) calendar days of contract award.

Bidder's Proposal must include a draft <u>Document Management Plan</u> addressing how documents will be controlled and how their deliverables will be tracked with respect to versioning including method and tools for document management (if appropriate). The Document Management Plan shall be submitted to SOS for review and approval within thirty (30) calendar days of contract award.

Requirement P5

The Bidder's Proposal must include a discussion of the content and development of a Requirements Traceability Matrix and Gap Analysis, and a discussion of how this will be used and updated to track requirements, programming, and test scenarios during all phases of the project. The Bidder must describe how the Gap Analysis will be conducted and incorporated into the Matrix along with how the Matrix will allow for linking test scenarios during the Acceptance Phase. A Requirements Traceability Matrix and Gap Analysis Plan shall be submitted to SOS for review and approval within thirty (30) calendar days of contract award.

Requirement P6

The Bidder's Proposal must include a draft Risk Management Plan, which includes a discussion of the risk management process, meeting frequency and how this Plan will be used and updated to identify and resolve potential and actual project risks. This Risk Plan must include a

discussion of the Bidder's philosophy related to Risk Management and tools to be used. The Risk Management Plan shall be submitted to SOS for review and approval within twenty (20) calendar days of contract award.

Requirement P7

The Bidder's Proposal must include a draft <u>Issue Management Plan</u>, which includes a discussion of how issues will be tracked, discussed, assigned, resolved and must identify responsible parties. This Issue Management Plan will be used and updated to identify and resolve potential and actual project issues throughout the life of the Project. This Issue Management Plan must include a discussion of the Bidder's philosophy related to Issue Management and the tools to be used. The Issue Management Plan shall be submitted to SOS for review and approval within twenty (20) calendar days of contract award.

Requirement P8

The Bidder's Proposal must include a draft <u>Implementation and Deployment Plan</u>, which links to the PMP and includes a discussion of strategy for a pilot testing, data conversion, and phased cutover (if applicable). This plan will be finalized in Phase 3, in accordance with the DED for this deliverable and with the project schedule.

2. <u>Project Progress Assessment, and Status Reporting</u>

Requirement P9

Bidder must agree to provide a written Monthly Project Status Report (MPSR) to the SOS VoteCal Project Manager. The Bidder's Project Manager must track and assess progress relative to the project's goals and schedule. The Bidder will be required to discuss project progress (actual accomplishments in comparison with Project PMP and timetables) with SOS Project Manager or designee, as SOS may request. Each month a formal, written MPSR must be presented to the SOS VoteCal Project Manager. The report must include the following:

- (a) Overall project status as of the date of the report;
- (b) Work tasks accomplished, deliverables submitted, and milestones achieved during the previous month;
- (c) Work tasks or deliverables percent complete;
- (d) Work tasks or deliverables that are currently behind schedule, reason for the delay, and remedial actions applied or recommended:
- (e) Work tasks to be accomplished by Contractor during the forthcoming month;
- (f) Identification of high and medium issues and risks or actual and potential problem(s) that could delay completion of the active phases or the production date, along with recommendation(s) for remedial action to ensure successful completion of the project on schedule.

The report must be signed by the Contractor's Project Manager certifying the report to be accurate.

Requirement P10

Bidder must agree that the Bidder's Project Manager will attend (in person) the VoteCal Weekly Status Meeting and provide a brief written and oral update of the previous week's accomplishments and what is

planned for the current week. The Bidder's Project Manager must also attend the monthly VoteCal Steering Committee Meetings.

3. Training

Requirement P11

SOS requires the Bidder to propose training for the SOS program team. Bidders must provide a draft <u>Training Plan</u>, which includes course descriptions, prerequisites, content, and length of class for SOS program and IT staff, and county election officials. SOS will provide one (1) training room in Sacramento for proposed solution training.

SOS expects the Bidder to provide training initially to all 35 SOS staff assigned to the VoteCal Project. SOS does not anticipate that any single training class will exceed 20 participants. Any SOS staff training identified by the Bidder and not proposed to be conducted at the SOS Sacramento training facility must include, as part of the cost for training, all travel and SOS per diem associated with travel to the training site for all SOS staff attending (refer to the Bidder's Library for SOS per diem rates). Bidders must consider the degree of integration that independent counties will have when determining the amount of training they will require.

- Bidder must specify in the draft Training Plan and provide VoteCal System training for SOS Voter Registration business program staff, training of SOS technical support staff and help desk staff at the SOS Sacramento Office
- Bidders must provide orientation and training for county staff integrating VoteCal with their existing EMS. Training must be conducted at up to five regional locations (North, Bay Area, Central Valley, Southern California, and Sacramento) to be provided by SOS.
- Bidders must specify in the draft Training Plan and provide training for county staff for counties using the VoteCal EMS.
- Bidders must provide training for SOS staff (to utilize the train the trainer approach) for on-going training post implementation.
- Bidders must specify the IT technical skill sets required for SOS IT staff that will be needed to support the proposed solution. Bidders must describe their technical knowledge transfer method with SOS IT staff and training as part of the Draft Training Plan.
- Bidders must describe their method of knowledge transfer for the SOS program and IT support and help desk staff.
- Bidders must identify system requirements for the training room, which will support up to 20 workstations (e.g., minimum configuration of workstations, connectivity requirements, etc.).
- Bidders must identify system requirements for a fully functional Training Environment to support the training room that is separate from the Development, Test and Production environments.
- Training aids, manuals, quick reference guides and other training materials must be provided as part of the solution, reflect the solution as implemented, provided for each student, and also be delivered to SOS in electronic format. Training materials shall become the

property of SOS upon completion of the training and may be modified or supplemented as needed by SOS. The Bidder must allow SOS permission to duplicate all materials and manuals.

4. Data Conversion

Requirement P12

The Bidder's Proposal must provide a draft <u>Data Conversion Plan (DCP)</u>, which describes:

- Data conversion approach, method, and roles and responsibilities;
- Conformance of all county data to VoteCal standards;
- Integration of existing county voter registration data from multiple counties into a single record for each voter (e.g., one record, one voter);
- Identification of the existing detail data requiring conversion
- The process of testing and validating data conversions prior to full data conversion, and how data conversion errors will be addressed and resolved;
- Recommendation of a conversion strategy of "cut-over," "pilot," or "phased":
- Method of how existing data will be transitioned into the new VoteCal:
- Maintenance of Calvoter and VoteCal systems in parallel during the "pilot" phase and how the integrity of the data will be ensured as the official list of voters while implementation is occurring; and
- Detailed transition schedule of activities that clearly defines key milestones, deliverables, tasks, and responsibilities and which are integrated with the PMP.

A test data conversion must be performed and all data validated and approved by SOS prior to the full conversion occurring. The Bidder must also include a discussion of how data conversion errors will be addressed. Refer to RFP Section III – Current Systems and Opportunities or the Bidder's Library for a discussion of the existing databases, Calvoter file structures, county upload file formats, and data volumes.

The DCP must be finalized, and approved by SOS thirty (30) days before starting conversion activities.

5. System Application and Hardware Requirements Documentation

Requirement P13

Bidder's Proposal must contain a detailed specifications list of the hardware (including peripheral equipment, cables, etc.) required to support the proposed VoteCal solution and proposed technical architecture (Exhibit VI.7). Bidder must also supply a complete list of all platform software products that will be used in the development, implementation or management of the proposed VoteCal solution (Exhibit VI.8).

If the Bidder's proposal includes the optional VoteCal EMS, then Bidder must identify any *additional* hardware or platform software components that will be used in the proposed VoteCal EMS that are not already

included in the core VoteCal System by completing and submitting the following exhibits with the Proposal:

- Exhibit VI.9 if there are additional hardware items that will be required to implement the VoteCal EMS central component of the system;
- Exhibit VI.10 if there are additional hardware items that will be required for counties to implement the VoteCal EMS central component of the system;
- Exhibit VI.11 if there are additional platform software products that will be required to implement the VoteCal EMS central component of the system; and
- Exhibit VI.12 if there are additional platform software products that will be required for counties to implement the VoteCal EMS central component of the system.

Bidders must agree to provide, as part of their solution, the following environments:

- · Development;
- Test:
- Parallel;
- Training;
- Training Development;
- · Staging; and
- Production.

Bidder must include detailed specifications for all hardware, software, and tools, etc., which are required to support these environments.

Bidder must also identify all environmental requirements to support the proposed system (e.g., physical space, electrical power requirements, HVAC, structural load-bearing support, etc.) both at SOS and at the state co-location facility.

Requirement P14

The Bidder must include in the Proposal sufficient technical and other product documentation for any platform software products to support the suitability of each product the Bidder is proposing to meet the requirements. (Refer to Section VIII – Proposal Format).

The Bidder must agree to implement the proposed solution applications and to provide systems documentation in hardcopy and electronically for the implemented solution in accordance with the Statement of Work (Appendix A, Attachment 1, Exhibits 2 and 3).

6. Testing

Requirement P15

The Bidder must provide a draft <u>Test Plan</u> that includes a discussion of the proposed Test Methodology and a sample Test Defect Log. The actual detailed Test Plan and Test Defect Log must be finalized and approved by SOS no later than fifteen (15) State working days prior to the commencement of testing activities. All business functional and technical requirements in this RFP must be traceable to the Test Plan

and the Bidder must provide SOS with a Requirements Traceability Matrix (refer to Requirement P5), which will provide a link from each test case back to each of the business functional and technical requirements in the RFP for testing purposes.

Bidder must include a discussion of all levels of testing that will be performed and the training to be provided for the SOS testing staff. SOS intends to perform a test with pilot counties (counties to be determined – Bidders should assume a total of 1.5 million voter registration records for the pilot counties). This must be factored into the Bidder's activities, PMP, and schedule.

If a Bidder proposes a Commercial off-the-Shelf (COTS) application or a Modified-off-the-Shelf (MOTS) application, out of the box testing must be included to validate the base product is functioning properly. Negative testing scenarios must be included. Bidder must address all levels of testing to be performed, including stress testing and how they will manage these activities including managing of the test environments.

The Test Plan must include testing for all configured and programmed items, all programs and reports, and a complete "end-to-end" test including testing of interfaces to the county systems. It will be the decision of the VoteCal Project Manager when acceptance testing has been successfully completed. The final detailed Test Plan will become the basis for verifying that the system operates as documented and intended.

NOTE: SOS has contracted with an Independent Verification and Validation (IV&V) contractor to perform independent testing of the delivered applications. Bidder must resolve any discrepancies identified by the IV&V contractor before testing is considered accepted and signed-off by SOS. Bidders must factor this activity and working with the IV&V contractor into their work plan.

7. Organizational Change Management

Requirement P16

The Bidder must provide a draft Organizational <u>Change Management Plan</u>, which includes a detailed discussion of their business change communication strategy. The Bidder's approach must address how the project will convey to all users and customers the new methods of doing business, roles and responsibilities, and common issues to be anticipated and mitigation scenarios in a project of this size and complexity. It is expected this strategy will address securing support and buy-in from the county users as well as SOS staff.

C. THE SOS MANAGEMENT ROLE

The successful Bidder will be required to work with the Independent Project Oversight Consultant (IPOC) and IV&V contractors under contract with SOS. SOS will provide the following:

- 1. Full-time VoteCal Project Manager to oversee the overall project.
- 2. On-site workstations (including desk, telephone, desktop computer with access to printers, copiers, and the SOS IT staff) at the SOS Sacramento Office with space for up to six (6) Contractor staff. Additional space can be provided during project activities, which require Contractor on-site presence that exceeds the number of workstations listed above.

- 3. SOS will provide Contractor staff access to the SOS voter registration program staff and the SOS IT staff that supports the existing applications as required during implementation. SOS staff will participate in design sessions, review deliverables, and participate in testing and training as necessary to fulfill their responsibilities of acceptance of the new solution. However, SOS staff will not perform programming, develop Contractor deliverables, or configure the system. These are tasks expected to be performed by the Contractor's implementation team. SOS will provide up to two (2) IT staff full time and three (3) voter registration/election business program staff half time.
- 4. An IPOC has been retained to support the VoteCal Project Manager in terms of monitoring SOS and the Contractor's performance, responsibilities, and deliverables. The IPOC may perform the following activities on behalf of SOS:
 - (a) Validation of deliverables and selected Contractor activity and performance in accordance with standards as defined in the approved Deliverable Expectations Document for the specific deliverable, the Contractor's Proposal, Project Plan, schedule, and Contractor's progress report accuracy; and
 - (b) Support Risk and Issue Management and reporting on behalf of SOS to the Department of Finance on timely issue resolution.
- An IV&V consultant has been retained to support the VoteCal Project Manager in terms of
 monitoring and validating the software deliverables, requirements traceability, and verifying
 test results in accordance with the Proposal, Project Plan, schedule, and Contractor's
 progress report.

D. PROJECT WORK STANDARDS

The following are work standards for the project and must be adhered to:

- 1. The Bidder will use Microsoft Office 2003 or the SOS-approved version installed at SOS in the preparation of all project correspondence and deliverables.
- 2. The Bidder must manage all project documentation in automated tools acceptable to SOS.
- 3. All project materials developed by the Bidder must be delivered in native electronic format (e.g., MS Word, MS Excel, editable PDF format) or in hardcopy when softcopy is unavailable.
- 4. The Bidder must comply with SOS security restrictions related to the access of the SOS facilities. Any exceptions to the established practices must be agreed to in writing by SOS.
- 5. The Bidder must maintain the VoteCal Project Schedule in the SOS-approved version of MS Project or an automated tool accepted in writing by SOS.
- 6. Project deliverables are required to be developed to a standard; preparation of the DED by the Contractor and SOS jointly for each project deliverable will specify which specific standards are applicable for the specific deliverable, acceptance criteria, and the SOS review timeframes for the specific deliverable.
- 7. All required project records and documentation must be maintained in the SOS project repository in electronic format (such as MS Word, MS Excel or editable PDF) or in hardcopy where soft copy is unavailable.
- 8. The Contractor must comply with project management industry standards (i.e., PMI, PMBOK) including the State Information Management Manual Project Oversight Framework and IEEE when designated by the SOS.

Requirement P17 Bidder's Proposal must include a statement agreeing to comply with the VoteCal Project Work Standards as stated in this RFP. Approval by VoteCal

Project Manager or designee must be granted prior to any change to these Work Standards.

E. PROJECT STAFFING AND ORGANIZATION

1. <u>Bidder Responsibilities and Staffing</u>

The Bidder will be responsible for providing all staff required to design, develop, and implement the VoteCal solution and must possess the relevant background and experience to undertake this effort. SOS requires that contractor analysis, design, development, testing, and training development activities be performed in the Sacramento area and may be at the SOS offices in Sacramento. No work shall be performed off shore. If Contractor identifies potential tasks that may be accomplished off-site without adversely affecting the project, the VoteCal Project Director or designee may grant exceptions based on Contractor's written justification to work off-site. Refer to Section IX.F.9 for how the requirements P18 and 19 will be evaluated and scored.

Requirement P18

The Bidder must provide an organization chart for their proposed team illustrating reporting lines of authority and how the Bidder envisions the VoteCal Project Manager, SOS IT staff and Voter Registration/Election program staff will relate to their team structure.

Bidders must provide a narrative discussion of their project team organization, roles and responsibilities, as well as the level of on-site (at the SOS office) presence anticipated for each staff person.

Minimum Bidder staffing qualifications for the anticipated roles can be found in Exhibit VI.2. The Bidder must propose specific individuals to fill all key Bidder staffing roles. The Bidder's actual project team must, at a minimum, include the Project Manager, Functional Lead, Technical Lead, Training Lead, Data Conversion Lead, and Programming Lead. One person may fill more than one role for staffing purposes. Staff proposed must demonstrate they have appropriate experience in the role for which they are proposed (demonstrated through experience on previous projects). Bidder-proposed key staff that do not meet the minimum qualifications as listed in Exhibit VI.2 will be disqualified during the evaluation phase.

SOS requires the Bidder to maintain continuity of staffing. If and when a contract is awarded, the winning Bidder will be expected to provide the individuals proposed in key roles (Project Manager, Business Lead, Technical Lead, Programming Lead, Training Lead, Testing Lead, and Data Conversion Lead) if those individuals are still in the employ of the Bidder. Once committed to the project, all proposed staff are expected to remain for the duration of the project in that role. SOS recognizes that a resignation or other events may cause Bidder project team members to be unavailable. VoteCal Project Management reserves the right to approve or deny all Bidder proposed replacement project team members. The proposed replacement staff must have the same or higher-level skills and experience as the staff person leaving the project. SOS reserves the right to validate the proposed replacement staff references prior to approving their participation on the project.

Requirement P19

The Bidder must provide resumes for all key individuals identified in Requirement P18 that have been proposed for this project. Resumes

must use Exhibit VI.3 Bidder Staff Resume form and must provide one (1) completed exhibit for each staff member proposed.

Note:

SOS strongly urges the Bidder to bring their proposed Project Manager and other proposed staff to attend the confidential discussions. Bidders should be aware that during the Final Proposal Evaluation, Bidder proposed staff references may be validated.

F. BUSINESS FUNCTIONAL REQUIREMENTS

Bidders must propose a solution for the VoteCal System, and can optionally propose the VoteCal EMS. Functionality is as outlined below:

VoteCal System: All identified requirements for the core system and the interfaces with independent county EMSs are mandatory requirements and must be addressed in all bid responses. Final Proposals will be evaluated on the quality of the response and solution for each requirement.

VoteCal EMS: Bidders may optionally propose an integrated EMS as part of their proposed solution, which SOS may, at its option, choose to implement concurrently with the VoteCal System, implement at a later date, or not implement at all. Additional evaluation points will be awarded to proposals that include such an option. To qualify for any or all of these evaluation points, the proposed VoteCal EMS must meet **all** of the VoteCal EMS business requirements identified below.

Table VI.1 contains the VoteCal System business functional requirements. This section contains the detailed business functional requirements that SOS requires of a proposed business solution to address the business processes described in Section IV. References to government code and California Code of Regulations (CCR) can be found in the Bidder's Library. Table VI.2 contains the VoteCal EMS business functional requirements, which Bidders have the option of proposing.

Bidders should remember that the SOS is expecting Bidders to develop a solution to meet the business needs. The Bidder is required to respond to each business requirement listed in this section using the table provided in this section. Bidders must not retype the requirements. If there is a discrepancy between the electronic copy and the hardcopy of the stated requirement in the RFP, the RFP Master hardcopy takes precedence. The response must comprise a narrative response for each requirement, consisting of:

- The Proposed Solution Description section: containing a detailed description, which includes how
 the Bidder's proposed solution meets the needs associated with the requirement. This
 description must be in sufficient detail for SOS to fully understand all aspects of the proposed
 solution or the proposal may be deemed non-responsive. Bidder must also identify whether the
 requirement:
 - Will be met entirely by existing proposed product without modification to business logic, technology or platform; or
 - Will be met with modification of or extension to an existing proposed product; or
 - Will require custom development to satisfy the requirement.
- 2. The Supporting Documentation Reference: indicate where (Proposal Response volume number and page number or section in the product literature) in the Bidder's RFP proposal volumes additional material can be found that is to be considered in the evaluation of the requirement response. Bidders are reminded that their response must be complete and in sufficient detail for the Evaluation Team to understand how the requirement is to be met.

Table VI.1 –Mandatory VoteCal System and Independent County Upload Business Requirements, Functionality Reference, and Requirement Response Form

All Bidders must respond to all requirements stated in the following table for the VoteCal System. Failure to respond to or meet one of these business requirements will be a material deviation.

Legend indicating where functionality will be required:

S = VoteCal System functionality applicable to the overall system, including independent counties using their own EMS to integrate with VoteCal and to counties using the VoteCal EMS

I = Functionality specific to the Interface with independent counties using their own EMS to integrate with VoteCal

Req. #	s	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S1			GENERAL REQUIREMENTS & FEATURES		
S1.1	Х		VoteCal must provide all county users with read-only access to the data for registered voters within other counties.		
S1.2	Х		VoteCal must provide the ability to update the voter registration data for voters within their county (except to move a matched voter from another county into the county).		
S1.3	Х		VoteCal must provide the ability for authorized SOS administrators to view all data provided by all counties.		
S1.3.1	X		VoteCal must provide SOS administrators with the ability to, with respect to any voter: Update basic voter registration data (e.g., name, street address, mailing address, phone numbers, partisan affiliation, date of birth, etc.); Modify voter status; Merge and unmerge potential duplicate voter records; Add comments to a voter record; and Add entries to voter activity history, such as contacts with the voter.		
S1.4	Х		VoteCal must automatically send electronic notice to the appropriate county whenever SOS administrators make changes to a voter record or whenever a voter record is updated through automatic processes at the SOS.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S1.5		X	VoteCal must support an XML-based application programming interface (API) for direct interface with independent election management systems (EMS) for counties that manage voter registration through their own local EMS. Where identified in specific business requirements, such as voter registration look-up, entry and updates, the interface must be interactive. For all other processes, the interface may be interactive, or batch-based, or both, as appropriate for the business process and the vendor's proposed solution. VoteCal must also implement a web browser-based user interface, so that SOS and independent county users can perform all required data view or entry functions and system administration functions directly into the VoteCal system.		
S1.6		Х	VoteCal must provide documented application program interfaces for all end user functions.		
S1.7		Х	Whenever processing requires a "notice" be sent to an independent county, that notice must be sent electronically and must include sufficient data for automatic processing and import of the data into the county EMS.		
S1.8	X		VoteCal must be designed to permanently store all historic data on each registered voter. Where necessary for system performance requirements, the system may be designed to archive data for voters whose registration has been cancelled for more than ten years such that the data for those cancelled voters can still be retrieved and viewed by authorized SOS and county users.		
S1.9	Х		All VoteCal system user interfaces must be web based, compatible with Internet Explorer (IE) 6.0 or higher and Firefox v 1.5 or higher browsers. They must be implemented in a manner that automatically ensures users are always using the most current approved version of software code.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S1.10	Х		VoteCal must provide a means for cities that conduct their own election to view the registration data for voters within their jurisdiction either directly with the system or through their county.		
S1.11	Х		VoteCal must provide a means for cities that conduct their own election to obtain the official list of registered voters and generate rosters, in accordance with the requirements of section S17 below.		
S1.12	Х		VoteCal must provide a means for cities that conduct their own election to update the voter participation history, in accordance with the requirements for section S18 below, for all voters who participate in a city-conducted election.		
S2			VOTER REGISTRATION: Registration Data		•
S2.1	Х		VoteCal must provide functionality that enables authorized county and state users to add new registered voters and to update data associated with existing registered voters.		
S2.2	X		VoteCal must allow for capture and storage of voter names including the following discrete data fields: • Suffix (Sr., Jr., other generations); • First name (full or initial); • Middle name (full name or initial); • Full last name (can include hyphenated last name); • Previous name(s); and • Alternate name (such as hyphenated, two last names, multiple-word last names, etc.).		
S2.3	Х		VoteCal must generate and store a unique identifier (UID) for each registrant in accordance with the rules.		
S2.4	Х		VoteCal must capture and store historic data on voter residence, mailing address and domicile county, including beginning and ending effective dates of those addresses.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
\$2.5	X		VoteCal must provide for capture and storage of the following discrete data fields related to a registered voter's residence address: • House number; • House fraction number; • House number suffix (alphanumeric); • Two-digit pre-directional code (i.e. S., SW) *; • Street name (alphanumeric); • "Alias" street name (alphanumeric); • Type (i.e., Street, Road, Lane) *; • Two digit post directional code *; • Apartment or space number (alphanumeric); • Unit Type *; • City; • Zip *; • Zip plus four* (optional with respect to each voter); and • County NOTE: * indicates code must conform to USPS standards		
S2.6	Х		VoteCal must be able to capture and store an address in a free- form format as a registered voter's official residence (e.g., the voter's address might be "THREE MILES NORTH OF RALPH'S GROCERY STORE, Alturas, CA" or "Mile Marker 29.5, Hwy 85").		
S2.7	X		VoteCal must be able to capture and store a voter's "Mailing" and "Vote-by-Mail" address using the following fields that can be used with mailing software: • Free-form data entry; • Fields long enough to meet US postal, foreign and military mail regulations; • Postal codes; • Country; and • Indicator of whether or not the mailing address is out of California.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S2.8	Х		VoteCal must provide the ability to capture and store a voter's date of birth. NOTE: Because a voter may have currently effective registrations that predate the requirement to provide date of birth, VoteCal must be capable of handling voters without a date of birth.		
S2.9	X		VoteCal must be capable of capturing and storing the following voter registration data: • Telephone number (up to four different numbers, including type and extension, as separate fields or records); • Gender; • Citizenship status; and • Email address.		
S2.10	Х		VoteCal must be capable of capturing and storing the voter's place of birth, both as free-form text and as user-defined codes (refer to Bidder's Library for current codes).		
S2.11	Х		VoteCal must be capable of capturing and storing a voter's language preference, based on codes that can be defined and modified by SOS administrators. (Refer to Bidder's Library for current language codes.		
S2.12	Х		VoteCal must be capable of capturing and storing a voter's accessibility/assistance needs, based on codes that can be defined and modified by SOS administrators.		
S2.13	X		VoteCal must capture, store and display the current status of any voter's registration, as well as historic changes in status, effective dates for such changes and reasons for the change. At a minimum, the status options must include: • Active; • Inactive; • Cancelled; • Pending; and • Declined.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S2.14	X		VoteCal must store a voter's current and historic political party affiliation, if any, based on codes that can be defined and modified by SOS administrators. (Please see the Bidder's Library for currently used political party codes.)		
S2.15	X		VoteCal must provide the ability to capture and store the following identification information for each registered voter in separate fields: • The voter's California issued Driver's License or State Identification Card (DL/ID) number: • The DMV verification status of that number (i.e., verified, notverified, or pending verification); and • If verified, the date verified.		
S2.16	X		VoteCal must provide the ability to capture and store the following identification information for each registered voter in separate fields: The last 4 digits of the voter's Social Security Number (SSN4), which must be accessible for input, query and reporting: The Social Security Administration verification status of that number (i.e., verified, not-verified, or pending verification); and If verified, the date verified.		
S2.17	Х		VoteCal must capture and store the voter's current and historical methods of registration (e.g., "by mail," "walk-in," "registration drive," "DMV," etc.), based on codes that can be defined and modified by SOS administrators.		
S2.18	X		VoteCal must determine and store, for voters who register by mail: Whether or not the voter is a first-time voter, subject to the HAVA ID requirement (HAVA Section 303[b]); Whether or not the voter has satisfied the ID requirement and, if so, how; and If exempt from this requirement, the reason for that exemption.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S2.19	X		VoteCal must capture and store the current and historical voter registration affidavits for each voter. For each such affidavit, VoteCal must capture the following discrete data: • Affidavit number; • Execution date (from the affidavit); • Date the affidavit was received; and • Effective date of registration of the affidavit.		
S2.20	Х		VoteCal must store and display the current and historic images of the full registration affidavit in ANSI/AIIM compatible format.		
S2.21	Х		VoteCal must be capable of displaying the current and historic images of the voter's signature independently from the affidavit.		
S2.22	Х		VoteCal must provide the ability to zoom into affidavit and signature images.		
S2.23	Х		VoteCal must capture and store information related to contacts and attempted contacts with the voter (voter visit to Election Office, phone calls, emails, etc.).		
S2.24	X		VoteCal must be capable of attaching and storing other images to a voter's record in GIF, TIF, JPG, and PDF formats, such as letters received from the voter.		
S2.25	X		VoteCal must provide the ability to capture, store and view comments and/or notes to a voter record using free-form text with a minimum of 1,024 characters. During the entry and editing of such notes, VoteCal must display a prominent warning that any such notes are a matter of public record.		
S2.26	X		VoteCal must allow multiple comments and notes to be stored for a single registered voter. Each note must have a creation date, County ID and User ID associated with it.		
S2.27	Х		VoteCal must retain historical registration data (e.g., residence address, registration status, partisan affiliation, home precinct and district assignment, etc.) such that processes and reports that are generated with an "as of" date correctly reflect the data applicable on the "as of" date.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
\$2.28	X		VoteCal must capture, store and manage data for confidential voters under statutes of the California Election Code (EC) §2166 for "Court ordered" confidential voters, EC §2166.5 for victims of domestic violence and stalking and EC §2166.7 for Public Safety Officers such that: • All such voters are required to provide a mailing address; • Such voters are automatically designated as permanent vote-by-mail voters; • All restricted information (residence address, phone number and email address) about such voters are not displayed unless the user has appropriate and sufficient permissions; • By default, any restricted information about such voters is not automatically included in any reports, queries or data extracts, and can only be included in such reports or data extracts by special action of users with appropriate and sufficient permissions; • Elections officials that create lists, rosters and data extracts from VoteCal may optionally chose whether to exclude the voter, or to include the voter but print the mailing address or the word "confidential" for the residence address of such voters; and • The counts of such voters may be included in or excluded from statistical abstracts such as the Report of Registration, based on user selection report options.		
S2.29	Х		VoteCal must capture and store the legal basis for which a voter qualifies as confidential (e.g., "court ordered," "victim of domestic violence," and "public safety officer") based on codes that can be defined and modified by SOS administrators.		
S2.30	X		VoteCal must capture and store the date of application for confidential status under EC §2166.7 (public safety officer) and provide the capability to automatically remove this status at the conclusion of the two-year period plus a user-defined grace period if not renewed.		

Req. #	s	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S2.31	Х		VoteCal must provide the ability for State and county users to automatically generate notices to confidential voters under EC §2166.7 that their confidential status will expire unless renewed.		
\$2.32	X		VoteCal must comply with EAC (<u>Election Assistance Commission</u>) reporting requirements. VoteCal must capture and report the following information from each county separately and as a total for domestic military, overseas military, and overseas citizens voters: the number of ballots issued and number of ballots voted returned. Furthermore, a total number of ballots counted and not counted/rejected, along with the reason why the ballot was rejected (e.g., no signature, unable to verify signature, ballot received after the close of the polls, and other) is required by the EAC.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S2.33	X		VoteCal must capture, store and report the current and historic status of uniformed services and overseas voters that have been identified and fall under the Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA). For each such person, VoteCal must capture, store and report the following information: • Category of qualification (e.g., uniformed services voter – domestic, uniformed services – overseas, non-military/civilian overseas voters); • Date and method of registration (e.g., state VRC, federal VRC, Federal UOCAVA Registration/Vote-By-Mail application postcard); • Date and method of application for vote-by-mail status (e.g., Federal UOCAVA Registration/Vote-By-Mail application postcard, County vote-by-mail application, etc.); • If application was rejected, the reason for rejection and the date notice of rejection was sent to voter; • Date and manner vote-by-mail ballot was transmitted to the voter for each election; and • For each election, date vote-by-mail ballot was received and returned, method of return (e.g., mail, fax, etc), form of voting (i.e., county issued vote-by-mail ballot or federal write-in vote-by-mail ballot), and, if rejected, the reason for rejection.		
S2.34	X		VoteCal must capture and report, in compliance with EAC and NVRA reporting requirements, the number of and basis for changes in voter registration status (i.e., to "inactive" or "cancelled".)		
S2.35	Х		VoteCal must capture and store a record of all list maintenance notices (e.g., RCP, ARCP, 8(d)(2) notice, CAN, etc.) sent to a voter.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S 3			VOTER REGISTRATION: Registrant Search		
\$3.1	X		VoteCal must allow an authorized user to query and locate an existing registered voter in the system for update using a variety or combination of criteria, including: Full or partial first name; "Smart name" variances on first name; Full or partial middle name; Full or partial last name; Soundex variations on last name; Full or partial residence address; Full or partial mailing address; Full or partial milling address; VoteCal assigned UID; DL/ID #; Registration affidavit number; SSN4; Date of birth (DOB); Place of birth; Political party affiliation; Precinct; and Political district.		
S3.2	X		If VoteCal finds more than one person during the search, VoteCal must provide a list of voter records that meets the search criteria and allows the user to select a person from the list to display applicable detail.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S3.3	X		VoteCal must provide the ability for an authorized user to search and retrieve one or more registered voters by using wildcard characters in one or more fields. For example: "Saun*" in the last name field to find all last names starting with "Saun". "*aun* in the last name field to find all last names containing "aun". "*ders" in the last name field to find all last names ending in "ders". "Saun*" in the last name field and "Har*" in the first name field to find records with last names starting with "Saun" and first name starting with "Har".		
S3.4		Х			
S3.5		Х	VoteCal must be capable of responding to requests from independent county EMSs for a specific registration record, providing all data associated with that registration record.		
S3.6	X		VoteCal must provide visual warning to the user upon initiation of a registrant search, if that search is likely to take longer than 60 seconds to complete or if the search will return a result set larger than an SOS configurable value. If more than one person is found during the search, the system must display a list of records that met the search criteria and allowing the user to select a person from the list to display applicable detail.		
S3.7	Х		VoteCal must allow an authorized user to view all data, including historic voter activity data, historic voting participation data, historic affidavit images and historic signature images for registrants that are registered in other counties.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S4			VOTER REGISTRATION: Registration Processing		
S4.1	Х		VoteCal must capture and store all new voter registrations received from counties or other state agencies, <i>or</i> it must update existing registrations if there is a user-verified match.		
S4.2	X		VoteCal must provide the ability for authorized users to search VoteCal for potentially matching records in VoteCal by providing the voter's name, DOB and, if provided, the DL/ID and/or SSN4. Prior to matching, VoteCal must attempt to obtain a verified ID for the voter through the IDV process.		
\$4.3	Х		If an existing registration record is found for the voter, based on an exact match from the query in S4.2, the existing record must be presented to the user for confirmation of the match and update of the existing registration record with the new registration information.		
S4.4	X		If VoteCal cannot find an exact match to an existing record from the query in requirement S4.2, VoteCal must present the user with a list of all existing records that match the record based on the established matching criteria and match threshold for this process so the user may select one for update. The data returned on each potential match must include an indication of the criteria used for the match and the associated confidence level for that criteria set.		
S4.5	X		VoteCal must provide the user with a method to retrieve and/or view existing data on a potential matching existing registration to determine whether, in fact, the existing voter is the same person who is attempting to register. The retrievable/viewable data for the potential matching voter must include: • All data fields available on the voter registration affidavit; • Historic addresses associated with the voter; • Voting participation history for the voter; • Voter activity history for the voter; • Current and historic signature images for the voter.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S4.6	Х		VoteCal must prevent a <i>new</i> record from being <i>added</i> to the database with the same UID as assigned to another registration record.		
S4.7	X		VoteCal must notify SOS administrators if the IDV verified DL/ID for a voter is associated with another registration record in the system and an authorized county user has determined that the existing registrant record in VoteCal with the same DL/ID is not the same voter.		
S4.8		X	VoteCal must process transactions from independent county EMS containing new voter registrations and modifications to existing voter registration records, including: • Voter registration data as specified in the Calvoter data standards, • Affidavit images; • Signature images; • Voting activity history; and • Voting participation history.		
S4.9	Х		VoteCal must allow authorized county users the ability to enter and refuse registration to a voter who has not signed the voter registration affidavit in accordance with EC §2150. VoteCal must note in the voter's record the basis for refusal of registration.		
S4.10	X		VoteCal must validate all new registration records (including reregistrations) to verify they meet legal requirements for voter registration, including: Valid date of birth (EC §2150) An SOS administrator configurable minimum age at time of registration; Permanent residence or domicile within California (EC §2101); and US Citizenship (EC §2101).		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S4.11	X		New voter registrations that do not pass the required validation criteria and result in "Fatal Errors" must be accepted but suspended with a "pending" status until required information is secured and provided, and VoteCal must note in the voter's record the basis for the suspense of registration. Electronic notice of the "pending status" and the basis for that action must be provided to the appropriate county. (Voters with a pending status are ineligible to vote.)		
S4.12	Х		VoteCal must provide electronic notice to the county on the suspension of new or modified voter registration data on the basis of an IDV finding of a SSN4 "single match – deceased."		
S4.13	Х		New registrations that pass validation requirements but do not meet established data standards or have other non-fatal errors must be accepted into the system, but the record must be flagged for needed correction and electronic notice of the data deficiency provided to the appropriate county.		
S4.14	Х		VoteCal must verify that the new or reregistered voter has been assigned to a valid home precinct. Voters that have not been assigned to a valid home precinct must be flagged for county follow-up and resolution, and an electronic notice sent to the appropriate county for investigation.		
S4.15	Х		VoteCal must provide a function to determine the United States Postal Service (USPS) Coding Accuracy Support System (CASS) standardized address for a registrant's effective mailing address.		
S4.15. 1	Х		VoteCal must provide electronic notification to county of the CASS standardized mailing address when the effective mailing address for a registrant does not conform to CASS standards and that address can be corrected to CASS standards.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S4.16	X		 VoteCal must flag the voter's record to indicate that the voter must present identification the first time the voter votes in a federal election if: The registration is for a voter that has not previously voted in a federal election in California, and The voter registered by mail and The system could not verify a DL# or SSN4 for the applicant and The voter is not registered under the Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) and The voter in not entitled to vote other than in person under the Voting Accessibility for the Elderly and Handicapped Act or other federal law. 		
S4.17	X		VoteCal must compare all newly registered voters against historic death records in the system. If a potential match is found based on matching criteria established by SOS, VoteCal must automatically flag the record as potentially deceased and send an electronic notice to the appropriate county.		
S4.18	X		VoteCal must compare all newly registered voters against historic felon records in the system. If a potential match is found based on matching criteria established by SOS, VoteCal must automatically flag the record as a potential felon and send an electronic notice to the appropriate county.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S4.19	X		 Upon acceptance of a voter registration, VoteCal must: Set the voter's status to "active"; Establish the voter's effective date based upon business rules established by the Secretary of State; Flag the record for generation and mailing of a Voter Notification Card (VNC); Send electronic notice to the appropriate county of the acceptance of the new registration and provide the county with the UID established for the voter; Send electronic notice to the county of any non-fatal errors with the registration record; Send electronic notice to the county that the voter must be contacted if the UID assigned is not based upon either the DL/ID or SSN4 provided by the voter and one or both was provided, or if the UID assigned is based upon a DL/ID and none was provided; and If the registration is a re-registration where the voter has moved to a new county, VoteCal must send electronic notice to the previous county of the voter's move to a new county. 		
S4.20	Х		VoteCal must send electronic notice to a county when a new voter has been registered in that county from other sources (such as DMV), or when a voter in another county has moved into that county.		
S4.21	Х		VoteCal must provide the ability for the county, when it receives notice that a voter has been moved out of that county, to review relevant data regarding that transaction and to confirm the change or reverse the change, forcing separate registration records.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S4.22	X		VoteCal must provide the ability to accept modifications received from counties to existing voter registration data, such as: Error corrections; Change in partisan affiliation; Change in voter status; and New Voter activity history entries, such as mailing of address verification notices to registrant or receipt of permanent vote-by-mail application.		
S4.23	X		If VoteCal identifies potential matches for a voter during the registration process and the user processing the registration determines no matches are valid, then VoteCal must subsequently send notice of the potential duplicate registration to the appropriate county for the potential duplicate pre-existing record(s) for review and verification that there is no match.		
S5			VOTER REGISTRATION: ID Verification		
S5.1	Х		VoteCal must support the existing DMV ID verification (IDV) interface on a transactional basis. (Refer to the Bidders Library for more detailed specification of that interface.)		
S5.2	X		VoteCal must, for all new registrations and re-registrations, automatically submit the voter name, date of birth and any provided DL/ID and/or SSN4 for validation from DMV or the Social Security Administration through the IDV interface.		
S5.3	X		VoteCal must automatically assign the voter a unique ID (UID) based on the DL/ID if: IDV verifies the provided DL/ID as an exact match, or IDV identifies a DL/ID as a single exact match when no DL/ID was provided, or when a different DL/ID was provided.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S5.4	Х		VoteCal must automatically generate a unique ID (UID) for the voter based on the SSN4 if: The IDV verifies the SSN4 as a single exact match or multiple exact match, and The IDV does not identify a DL/ID as a single exact match when no DL/ID was provided.		
S5.5	Х		VoteCal must automatically generate a unique ID (UID) for the voter based upon an SOS-approved algorithm, if the IDV is unable to either match the provided DL/ID or SSN4 or identify a single exact match to a DL/ID.		
S5.6	Х		When VoteCal generates a UID that is not based on the DL/ID, the algorithm must ensure that if the voter reregisters at a later time with the same information, the system will generate the same UID or base number for the UID.		
S5.7	X		When VoteCal validation cannot be completed at time of entry due to DMV/SSA verification system unavailability, the record must be saved with a generated UID. VoteCal must automatically retry an incomplete ID verification, and if a DL/ID or SSN4 is verified for the voter, VoteCal must: Reassign an appropriate UID to the voter; Notify the county of the change in the voter's UID; and Identify any potential pre-existing records for that voter and provide electronic notice of the potential match to the county of the pre-existing record(s).		
S6			VOTER REGISTRATION: "Motor Voter"		
S6.1	X		VoteCal must receive new voter registration data and voter registration address change data, including digitized signature images, from the DMV in accordance with the National Voter Registration Act (NVRA), EC §2102, EC §2107 and Vehicle Code §12950.5.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
\$6.2	Х		VoteCal must attempt to match DMV voter registration change of address (COA) and new registration transactions against existing voter registration records using matching criteria established by the SOS.		
\$6.3	X		For matches of DMV COA and new registration transactions against existing voter registration records that meet or exceed the established confidence threshold, VoteCal must automatically: Update the existing voter registration record with the new voter registration data received from DMV; Reassign the voter to the appropriate county; Update the voter activity history with the basis for registration changes; Flag the voter's record for automatic generation of a VNC; and Send an electronic notice to the appropriate county(s) of the registration change.		
S6.4	X		For matches of DMV COA and new registration transactions against existing voter registration records that do not meet the established confidence threshold, VoteCal must automatically: Send an electronic notice of the potential match and address update for the pre-existing voter registration record to the appropriate county for follow-up and determination if the potential match is valid; and Update the voter activity history of the potential registration change/match from DMV.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S6.5	X		 When a county verifies that a pre-existing voter registration record matches the new DMV registration or COA transaction, VoteCal must: Record that information, including the basis for determination, in the voter activity history of the matched voter; Update the voter's registration record with the new address from the DMV COA transaction; Reassign the voter to the appropriate county; Flag the voter's record for automatic generation of a VNC; and Send an electronic notice to the appropriate county(s) of the registration change. 		
S6.6	Х		If a county determines that the potential match of DMV COA transaction against a pre-existing voter registration record is not valid, VoteCal must update the voter activity history accordingly to indicate the determination that the DMV COA transaction was not associated with the voter and the basis for that determination.		
S6.7	X		 When a new DMV registration does not match any existing voter registration records, VoteCal must: Create a new voter registration record for the voter; Update the voter registration with the method of registration; Flag the voter's record for automatic generation of a VNC; and Send an electronic notice to the appropriate county(s) of the new registration. 		
S6.8	Х		When a DMV COA transaction cannot be matched against any existing voter registration records, VoteCal must send electronic notice of the unresolved transaction to the appropriate county for follow-up investigation.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S6.9	X		When a county determines that an unresolved DMV COA transaction cannot be matched against any existing voter registration records, VoteCal must flag the DMV COA transaction as a "Non-Match," requiring notice to be sent to the potential voter in the DMV COA transaction.		
S6.10	Х		VoteCal must allow SOS administrators to record whether or not a county wants the SOS to mail notice of DMV COA transaction failures.		
S6.11	Х		VoteCal must allow SOS administrators to generate a data extract on a batch basis so that a third-party mailing house can print the notice of a DMV COA transaction failure on behalf of counties that have opted not to mail their own notices.		
S6.12	X		VoteCal must automatically note in a voter's activity history when a notice of DMV COA transaction failure has been generated by VoteCal for that voter.		
S6.13	X		VoteCal must be capable of receiving electronic notice from a county that the county has generated and sent a county-generated written notice to a voter that their DMV COA update was unsuccessful.		
S7			VOTER REGISTRATION: Voter Notification Cards (VNC)		
S7.1	X		VoteCal must provide the ability for SOS administrators to define and modify the format and content of the VNCs. Per EC §2155, the VNCs must include the following data: Full name of the voter; Mailing address of the voter; Partisan affiliation of the voter; and Effective date of registration (or registration change).		
S7.2	Х		VoteCal must provide users with the option to include the following data on the VNC: • Assigned precinct; and • Assigned US Congressional, State Senate, State Assembly, State Board of Equalization and County Supervisory districts.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S7.3		Х	VoteCal must have the capability to receive and apply electronic notice from an independent county EMS that a VNC has been sent to a voter.		
S7.4		Х	VoteCal must provide electronic notice to the independent county when a VNC has been generated for a voter by the State.		
S7.5	X		VoteCal must provide the ability for authorized SOS administrators to generate printed VNCs for all newly registered voters in any or all counties, and all voters in any or all counties whose registration has been updated with a change in name, address, partisan affiliation, precinct assignment or political district assignment.		
S7.6	X		VoteCal must have the capability to automatically generate a data extract of all required information across the State on a batch basis so that VNCs can be printed by the State through a third-party mailing house.		
S7.7	Х		VoteCal must provide the ability for authorized county users or SOS administrators to confirm that a VNC has been successfully printed for a voter, so that VoteCal can provide the option to prevent printing of duplicate VNCs.		
S7.8	Х		VoteCal must provide the ability for authorized users to reprint VNCs on an individual or group basis when necessary.		
S8		<u>I</u>	VOTER REGISTRATION: Synchronization for Independent Counties		
S8.1		Х	VoteCal must provide the ability to compare a list of unique voter registration UIDs and associated voter registration status from an independent county with the data in VoteCal and identify differences.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
\$8.2		Х	VoteCal must provide the ability for an independent county to generate an electronic list of voter registration records for that county in the VoteCal database for comparison and synchronization with voter registration records in the county EMS.		
S9			LIST MAINTENANCE: General		
S9.1	X		VoteCal must provide the capability for SOS administrators to track, by county and issue, unresolved voter registration and list maintenance issues, including: • UID assignment issues; • Fatal errors with voter registration; • Non-fatal errors with voter registration, such as data format errors or precincting errors; • Potential duplicate registrations; • Potential matches with death records; • Potential matches with felon records; • Potential matches with NCOA records; and • Potential matches with DMV COA transactions and registrations.		
S9.2	X		 Whenever duplicate registrations are confirmed for the same voter, whether through the process of duplicate matching or registration processing, VoteCal must: Effectively merge the registration records into a single registration record, including voter activity history and voting participation history into the record with the most recent date of registration (or voter registration update activity); and Automatically send an electronic notice to the county(s) whose voter records have been reassigned or merged with the newest registration record. 		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S9.3	X		Should it subsequently be determined that registration records were incorrectly merged into a single record, VoteCal must permanently provide SOS Administrators and authorized county users with the capability to "un-merge" such records into separate registration records and appropriately apply UIDs to the voters.		
\$9.4	Х		VoteCal must provide electronic notice to counties of applied changes to the VoteCal voter registration data that originate outside of the county (such as applied death record, Statemailed Residency Confirmation Postcard (RCP) or State-mailed VNCs).		
S9.5	Х		VoteCal must send electronic notice to counties of recommended changes to the county's registered voters for county research and determination (such as potential duplicate registrations identified, potential NCOA updates, potential death record matches, and potential address corrections).		
S9.6	X		VoteCal must record in a voter's activity history the effective date of cancellation of a voter's registration and the basis for that cancellation.		
S9.7	X		VoteCal must allow authorized SOS Administrators the capability to designate and modify the content and format of: Notice of DMV COA transaction failure; Pre-Election Residence Confirmation Postcards (RCPs); Alternate Residence Confirmation Postcards (ARCP); Change of Address Notification (CAN) (all forms); and NVRA 8(d)(2) notices.		
S9.8	Х		All VoteCal generated mail notices to voters (including the VoteCal EMS) must be bar-coded to facilitate the ready identification of the voter and expedited processing of a returned notice.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S9.9	X		VoteCal must capture and report the quantities by type, of list maintenance notices sent to voters, received back from voters, and returned as undeliverable, in accordance with EAC and NVRA reporting requirements.		
S10			LIST MAINTENANCE: Record Matching		
S10.1	X		 VoteCal must include a user-configurable method for authorized SOS administrators to: Establish sets of registration record matching criteria; Configure which criteria apply to each type of matching function (e.g., new registration matching, death record matching, NCOA matching, etc.); Assign "confidence" levels to each criteria set as it applies to each matching function; and Establish threshold confidence levels required for manual or automatic application of matches for each matching function. 		
S10.2	×		 VoteCal must provide the ability for SOS administrators to establish one or more basis for matching data in a registration record field, including (where applicable): Exact character match; First "X" characters of the field (where "X" is user configurable); Same characters and order in string, but with spaces and punctuation removed; Soundex match (or alternative method based on phonetic pronunciation); "Smartnames" match based on common variations of First Name established by SOS administrators (e.g., Robert = Bob, Bobby, Rob); "X" matching characters within string; and Same month and year. 		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S10.3	X		VoteCal must provide the ability for SOS administrators to identify a set of matching criteria based on combinations of individual field match settings, such as: • First Name- with "Smartnames"; Last Name- first 4 characters; and Date of Birth- same day and month or • DL/ID#- exact match; First Name- with "Smartnames"; Last Name- with Soundex.		
S10.4	X		VoteCal must provide the ability for SOS administrators to configure and update whether or not an established matching criteria set is applied to each matching function, including: New & updated voter registration; Duplicate registration checks; DMV Motor Voter processing; Death record matching; and Felon record matching.		
S10.5	Х		VoteCal must provide the ability for SOS administrators to individually establish "confidence" values to each established matching criteria set as it applies to each potential matching function.		
S10.6	X		VoteCal must provide the ability for SOS administrators to establish and modify confidence thresholds for each matching function so that matches found that meet or exceed that confidence threshold are automatically applied by the system. For matches that do not meet that threshold, but meet a lower "manual" threshold, VoteCal must generate electronic notices to the appropriate county for match review and resolution.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S10.7	X		For high-confidence matches that exceed the established threshold for automatic application of the match, VoteCal must provide the capability for SOS administrators or authorized county users to configure so that the system, for that county, either: • Automatically applies such registration changes and sends electronic notice of the change to the county; or • Applies such a change, but when the change would cause an existing voter registration to be cancelled, does not actually cancel a voter's registration until the change has been accepted by that voter's county.		
S10.8	X		For matches of registration records (e.g., existing/duplicate registration, death records, felon records, DMV COA, NCOA, etc.) that meet or exceed the established confidence level for automatic processing of that match function, VoteCal must either apply the match and send electronic notice to the appropriate county of that transaction, or must provisionally apply that match until accepted by the county, for matches of registration records (e.g., existing/duplicate registration, death records, felon records, DMV COA, NCOA, etc.) that meet or exceed the established confidence level for automatic processing of that match function.		
S10.9	Х		VoteCal must send electronic notice to the appropriate county for review and resolution for matches of registration records (e.g., existing/duplicate registration, death records, felon records, DMV COA, etc.) that do not meet the established confidence level for automatic processing but meet the established minimum confidence level of that match function.		
S10.10	Х		VoteCal must provide the capability for authorized county users to cancel match-based transactions that have been automatically applied, or to not accept such automatic transactions. In such instances, VoteCal must reverse any changes that have been applied to the record and handle the transaction as a confirmed non-match for that process.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S10.11	X		VoteCal must include in the notice to the county, for automated registrant changes or potential registrant changes identified through record matching, the matching criteria and confidence value of that particular match.		
S11			LIST MAINTENANCE: DHS Death Records		
S11.1	Х		VoteCal must have the capability to receive the California Department of Health Services (DHS) new death records file, as well as to store such records on an ongoing basis.		
S11.2	Х		VoteCal must match all new death records received from DHS against existing voter registration records to identify existing voters that may have died.		
S11.3	X		 For matches with new death records that meet or exceed the established confidence threshold, VoteCal must automatically: Cancel the voter's registration; Record the basis for that cancellation in the voter's activity record; and Send an electronic notice to the appropriate county of the cancellation and its basis. 		
S11.4	X		For matches with new death records that do not meet the established confidence threshold, VoteCal must automatically: Note the potential match in the voter's record; and Send electronic notice to the appropriate county of the potential match for investigation and resolution.		
S11.5	Х		VoteCal must provide the ability for an authorized county user to enter its determination that the match is valid into the voter's record and cancel registration of the voter.		
S11.6	X		VoteCal must provide the ability for an authorized county user that has investigated and determined that the match was invalid to note that determination in the voter's record and remove the indication that the voter is potentially deceased from the voter's record.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S11.7	X		When counties cancel a voter's registration by reason of death from information received locally within the county, VoteCal must automatically add that information to the historic death records stored within VoteCal.		
S11.8	Х		VoteCal must permanently provide SOS administrators and authorized county users with the capability to undo death record matches that have been applied to a voter.		
S12			LIST MAINTENANCE: CDCR Felon Data		
S12.1	Х		VoteCal must have the capability to receive the California Department of Corrections and Rehabilitation (CDCR) new felon records file, to store such records on an ongoing basis; and, when notice of completed sentence or parole has been received, to delete or mark the record so that the felon record is no longer checked for a match with voter registration records.		
S12.2	Х		VoteCal must match all new felon records received from CDCR against existing voter registration records to identify existing voters that may have become ineligible due to imprisonment.		
S12.3	X		For matches with new felon records that meet or exceed the established confidence threshold, VoteCal must automatically: Cancel the voter's registration; Record the basis for that cancellation in the voter's activity record; and Send an electronic notice to the appropriate county of the cancellation and its basis.		
S12.4	X		For matches with new felon records that do not meet the established confidence threshold, VoteCal must automatically: Note the potential match in the voter's record; and Send an electronic notice to the appropriate county of the potential match for investigation and resolution.		
S12.5	Х		VoteCal must provide the ability for an authorized county user to enter its determination that the match is valid into the voter's record and cancel registration of the voter.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S12.6	X		VoteCal must provide the ability for an authorized county user that has investigated and determined that the match was invalid to note that determination in the voter's record and remove the possible felon flag.		
S12.7	X		When counties cancel a voter's registration by reason of felony conviction and sentencing from information received locally within the county, VoteCal must automatically add that information to the current felon records stored within VoteCal.		
S12.8	Х		VoteCal must permanently provide SOS administrators and authorized county users with the capability to undo felon record matches that have been applied to a voter.		
S13			LIST MAINTENANCE: Duplicate Identification		
S13.1	X		VoteCal must provide the ability for SOS administrators to schedule and run duplicate checks across all voters in the database to identify potential duplicate registration records for the same voter using the criteria established for such matching.		
S13.2	X		VoteCal must automatically merge voter registration records and assign the voter to the appropriate county when duplicate records are identified based on match criteria sets that meet or exceed the established confidence level threshold. VoteCal must then automatically send an electronic notice to the county(s) whose voter records have been reassigned or merged with the newest registration record.		
S13.3	X		VoteCal must, before automatically applying potential duplicate records, check voting participation history for the older registration record. If the older record indicates voting activity in an election after the date of registration in the newer record, the match must not be applied automatically and, instead, VoteCal must send electronic notice of potential match to the appropriate county(s) as indicated following in requirement S13.4.		

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Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S13.4	X		VoteCal must generate electronic notice of potential duplicates to the county(s) with the older date(s) of registration for identified potential duplicate matches that do not meet the established confidence threshold. The notice must include, for each potential registration record in the duplicate set, the following: Registrant name; Date of birth; UID; Date of registration; and Basis of match.		
S13.5	Х		VoteCal must flag potential duplicate records that have been verified as not being duplicates so they are no longer reported as unresolved potential duplicates, so that they may be omitted as potential duplicates in subsequent duplicate checks.		
S13.6	Х		VoteCal must provide the ability for authorized SOS users to remove flag(s) that indicate two registrations are not actually duplicate records for the same voter.		
S14			LIST MAINTENANCE: NCOA		
S14.1	Х		VoteCal must provide the ability to compare and match voter registration addresses against the USPS National Change of Address (NCOA) data, identifying registrants who have changed their mailing address. (NOTE: SOS will be responsible for obtaining all required USPS permits, or identifying a third-party service.)		
S14.2	Х		VoteCal must provide the ability to automatically apply NCOA address updates to voter registration records when a predefined confidence level of match is met.		
S14.3	Х		VoteCal must send an electronic notice to the voter's county of all NCOA potential address updates that fall short of the threshold confidence level established for automatic matching.		

Req. #	s	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S14.4	Х		VoteCal must provide the ability for authorized county users to update the voter record on whether the NCOA address update was valid or invalid.		
S14.5	Х		VoteCal must retain all potential NCOA address updates until the county jurisdiction has applied or discarded the matched new address.		
S14.6	X		 When an NCOA address update has been determined to be valid where a voter has a forwarding address in the same county, VoteCal must automatically: Update the (residence or mailing) address of the registrant; Note in the activity history for that registrant that the record was updated because of NCOA match; and Flag the record for automatic generation and mailing of a CAN in accordance with EC §2225. 		
S14.7	X		When a NCOA address update has been determined to be valid where the voter has a forwarding address in a different California county or outside the State, VoteCal must automatically: • Change the status of the registrant to "inactive"; • Note in the activity history for that registrant that the record was updated because of NCOA match; and • Flag the record for automatic generation and mailing of a CAN in accordance with EC §2225.		
S14.8	X		When a NCOA address update has been determined to be valid where the voter has no forwarding address, VoteCal must automatically: • Change the status of the registrant to "inactive"; • Note in the activity history for that registrant that the record was updated because of NCOA match; and • Flag the record for automatic generation and mailing of a CAN in accordance with EC §2225.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S15			LIST MAINTENANCE: Pre-Election Residency Confirmation Postcards (RCPs)		
S15.1	Х		Pursuant to EC §2220, VoteCal must provide the ability for SOS administrators to generate pre-election residency confirmation postcards (RCPs) to all active registered voters that have not voted in an election within the past six (6) months in any or all counties at least 90 days prior to a primary election.		
S15.2	Х		VoteCal must provide the ability to automatically generate a data extract of all required information in any or all counties on a batch basis so that RCPs and ARCPs can be printed by the State through a third-party mailing house.		
S15.3	Х		VoteCal must provide the ability for authorized SOS administrators to define and modify the format and content for the RCPs.		
S15.4	Х		VoteCal must automatically note in a voter's activity history when an RCP or ARCP has been generated for that voter.		
S15.5	Х		Pursuant to EC §2224, VoteCal must provide the ability for SOS administrators to generate alternate residency confirmation postcards (ARCPs) to all active registered voters that have not voted in an election within the past four years and that have not updated their residence address, name or partisan affiliation within that time.		
S16			LIST MAINTENANCE: Change of Address Notification (CAN)		
S16.1	X		VoteCal must provide the ability for SOS administrators to automatically generate a data extract of all required information for one or more counties across the State on a batch basis so that CANs may be printed by the State through a third-party mailing house.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S16.2	Х		In accordance with EC §2225, subsections (b), (c) and (d), VoteCal must automatically generate the appropriate CAN notice for each voter depending on whether the voter has a forwarding address within the county, a forwarding address outside the county, or no forwarding address.		
S16.3	Х		VoteCal EMS must provide SOS administrators with the capability to designate and modify the content and format of all forms of the CAN notice.		
S16.4	Х		VoteCal must automatically note in a voter's activity history when a CAN has been generated for that voter.		
S17			VOTER ELECTION DATA: Official List of Voters		
S17.1	X		VoteCal must provide the ability to generate the official list of eligible registered voters with respect to any given election based on business rules configurable by SOS administrators (i.e., 18 years of age on election day, effective date of registration at least 15 days prior to election day, registration status active or inactive).		
S17.2		X	VoteCal must provide the ability for authorized independent county users to export the official list of registered voters with respect to any election.		
S17.3		X	VoteCal must provide the ability to import and apply the voting precinct assignment for each registered voter for a given election from the independent county EMS.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S17.4	X		VoteCal must provide the ability for counties to generate and locally print precinct rosters (and supplemental rosters) either as indices or as roster indices for each voting precinct from VoteCal. Each roster must be printed in one or more (up to 3) accepted formats as defined by the SOS administrator, and must include the following information for each voter: • Voter full name; • Voter residence address; • Voter telephone number; • Voter UID (in bar-coded format only), • Indication if the voter is required to provide identification as a first-time voter who registered by mail; • Voter status (active or inactive); • Ballot style; • Partisan affiliation (primary elections only); and • Indicator if voter has already voted or been assigned a ballot (early or vote-by-mail voting).		
S17.5	Х		VoteCal must provide the ability for counties to extract the required data to locally generate and print precinct rosters and supplemental rosters in an alternate format, or to import into an electronic poll book application.		
S17.6	Х		VoteCal must provide the ability to record when voters have been included in a printed roster so that they may be excluded from the subsequent generation of supplemental rosters.		

Req. #	s	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S18			VOTER ELECTION DATA: Voter Participation History		
S18.1	X		VoteCal must maintain historic voting participation for all voters, regardless of the number of elections in which voters might have participated The history captured and maintained for each voting event must include: • State defined code for the election; • Election date; • How voted (vote-by-mail, early, polling place, or provisional); and • Partisan ballot voted (for primary elections).		
S18.2	X		VoteCal must automatically clear the indicator in a voter's record requiring the voter to provide ID the first time the voter votes in a federal election based on voting participation history received from a county indicating that the voter has voted in a federal election.		
S18.3		Х	VoteCal must provide the ability to import and apply voter participation history from independent county EMSs after each election, recording each voter that voted in the election and the method of participation (early, vote-by-mail or in-person).		
S19			VOTER ELECTION DATA: Vote-by-Mail Voting		
S19.1	X		 VoteCal must record and track current and historic vote-by-mail voting status of each voter, including: Type of vote-by-mail: one-time, special absentee (military and overseas – see EC §300), permanent vote-by-mail (EC §3201), and all-mail precinct; Type of application (State defined such as on-line, federal form, sample ballot return application, etc.); Date application received; Source of the application (how received); Whether or not the application was approved or denied; and If denied, the reason for the denial. 		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S19.2	Х		VoteCal must be capable of capturing, storing and reporting the following information related to every election: • When a voter was mailed a vote-by-mail ballot; • When the ballot was received by the elections official; • Whether the ballot was accepted or rejected; and • If rejected, the reason for that rejection.		
S19.3	Х		VoteCal must permanently retain all historic information related to vote-by-mail voting by a registered voter.		
S19.4		X	VoteCal must provide the ability to import and apply the status of each vote-by-mail ballot with respect to each vote-by-mail voter, including: • When a voter was mailed a vote-by-mail ballot; • When the ballot was received by the elections official; • Whether the ballot was accepted or rejected; and • If rejected, the reason for that rejection.		
S20			VOTER ELECTION DATA: Provisional Voting		
S20.1	X		For voters who vote a provisional ballot in an election, VoteCal must be capable of capturing, storing and reporting whether or not the provisional ballot was counted and, if not, the reason it was not counted.		
S20.2	Х		VoteCal must provide the ability for SOS administrators to configure the reason codes for rejection of a provisional ballot.		
S20.3		X	VoteCal must provide the ability to import and apply the status of each provisional ballot cast in an election, including the reason for rejection of each provisional ballot not counted.		
S21			PRECINCTS AND DISTRICTS: Precinct – District Mapping		
S21.1	X		VoteCal must require and store each voter's current and historic home precinct assignment. Precinct data storage must, at a minimum, conform to the current Calvoter data standards for Precinct & Precinct Part (refer to Bidder's Library for standards)		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S21.2	X		VoteCal must be able to identify, from the voter's home precinct, the voter's voting district for US Congress, State Senate, State Assembly, Board of Equalization and County Supervisory Districts, the municipality of residence if a voter is entitled to vote in that municipality, or if not, that the voter resides in the county's unincorporated area.		
S21.3	Х		VoteCal must allow counties to define additional local election districts (e.g., school districts and water boards) and must automatically identify and report a voter's residence within such districts based on the voter's "home precinct" assignment.		
S21.4	Х		VoteCal must detect "orphan voters" who do not have a valid home precinct assignment and "orphan precincts" that are not assigned to the required State Senate, State Assembly, Board of Equalization, County Supervisory and municipality/unincorporated area districts.		
S21.5		X	VoteCal must provide the ability to accept and apply political district and precinct data from independent counties so that VoteCal contains a replica of the political district and precinct data maintained in the independent county EMS. The replica must be stored in a standard format for VoteCal so that VoteCal can determine the political district memberships for each registered voter.		
S21.6		Х	VoteCal must provide the ability to accept and apply batch updates of voter registration data from independent counties for specific global data updates (e.g., reassigning home precincts) after authorization by SOS administrators.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S21.7		X	VoteCal must detect and notify the independent county and SOS administrators if changes in political district or precinct data have created orphaned voters, precincts or political districts (i.e., voters without a home precinct or without required political district assignments and home precincts without required political district assignments).		
			VoteCal must provide the ability to suspend detection and notification until batch or other mass updates are completed.		
S21.8		Х	VoteCal must provide electronic notice to the county of invalid changes to precinct and political district data that have been submitted to VoteCal by the independent county.		
S21.9		X	VoteCal must provide the ability for SOS administrators to track unresolved errors with county submitted changes to the precinct and political district data.		
S21.10		Х	VoteCal must provide the ability for independent county users to review and export the precinct and political district data stored within VoteCal for that county.		
S22			ELECTION MANAGEMENT: Vote-by-Mail & Mail Ballot Management		
S22.1	Х		VoteCal must provide SOS administrators with the capability to define and modify the reasons for rejecting vote-by-mail and mail ballots and the associated reason codes.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S23			SOS PROCESSES: Political Party Tracking		
S23.1	X		VoteCal must allow SOS administrators` to define political parties. For each such party, the system must track and report the following information: SOS assigned party code (refer to the Bidder's Library for codes for currently recognized parties); Whether or not the party is Qualified, Attempting to Qualify, or Non-Qualified; Date of all changes in party status (Qualified/Non-Qualified/Attempting to Qualify; Reason for such changes (if applicable); and Current state party contact information.		
S24			SOS PROCESSES: Report of Registration (ROR)		
S24.1	Х		In accordance with EC §2187, VoteCal must generate and print the Report of Registration (ROR) in the currently established format. (Refer to the Bidder's Library)		
S24.2	Х		VoteCal must provide the ability for each county to indicate to the system that they have completed entry of all voter registrations applicable to a specific ROR.		
S24.3	X		As of a user-specified date, VoteCal must calculate and report the number of active registered voters by county and political districts (Congressional, State Senate, Assembly, Board of Equalization, incorporated City and County Supervisory districts) within the county. The registration totals must be broken down by qualified political party affiliation within each district.		
S24.4	X		VoteCal must provide the ability for SOS administrators to define and modify the format and content of the ROR reports. VoteCal must generate each finalized ROR in .PDF, MS Excel and tab-delimited text file formats. These reports must comply with EC §2187 and will be similar to the sample ROR reports in the Bidder's Library.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S24.5	Х		VoteCal must calculate and report the number of active registered voters by county that are affiliated with each party attempting to qualify as of a specified date.		
S24.6	Х		VoteCal must provide the ability for authorized SOS administrators to input and store the estimated number of persons "eligible to register to vote" for each county as of a specified date for each ROR and keep the data permanently.		
S25			SOS PROCESSES: State Voter Information Guide (VIG)		
S25.1	Х		VoteCal must generate State "ballot pamphlet" or Voter Information Guide (VIG) mailing lists of registered voters eligible to vote in an upcoming election that meets the established specifications for this mailing list.		
S25.2	Х		VoteCal must capture and store a voter's request to not be mailed the VIG. VoteCal must automatically exclude all voters who have so "opted out" from any VIG mailing lists generated.		
S25.3	X		VoteCal must be capable of "householding" the VIG mailing list files in all of the following manners: Only one mailing label is generated for all voters with identical last name, address and language preference; Only one mailing label is generated for all voters with identical address and language preference; and Only one mailing label is generated for all voters with identical language preference and mailing address and fewer than "X" voters share that exact address, where "X" is a parameter that can be configured by SOS administrators.		
S25.4	Х		VoteCal must generate the mailing list so that all addresses in the mailing list conform to US Postal Service standards, including CASS standards, and the list is presorted to obtain optimal bulk-mailing rates.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S25.5	X		VoteCal must identify any registrants with a mailing address that could not be made to conform to the established USPS mailing standards. Such registrants must be excluded from the State VIG mailing lists and electronic notice must be provided to the appropriate county of the address deficiency for county correction and mailing.		
S25.6	Х		VoteCal must update the voter activity record for each voter for whom a VIG address label (individual or household) was generated, indicating the date that label was generated.		
S25.7	X		VoteCal must provide the ability for SOS administrators and authorized county users to generate mailing lists (or extracts of data for mailing lists) for all eligible registered voters that were not included in the State VIG mailing, including voters: • With a mailing address outside of California; • Whose address could not be normalized to the established standards; or • Are eligible to vote in the upcoming election but have an		
S25.8	X		effective date of registration after E-60. VoteCal must update the voter activity history for each voter when a county has generated a VIG mailing label for that voter.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S26			SOS PROCESSES: Public Voter Registration Data Requests (PVRDR)		
S26.1	Х		VoteCal must allow authorized SOS administrators and authorized county users to input, track and review Public Voter Registration Data Requests (PVRDRs), including: Requestor name; Requestor ID number and type; Requestor organization; Requestor residence and business addresses; Requestor contact information (phone, fax, email addresses); If Requestor is acting as an authorized agent for a qualified party, the name, address and contact information for the party legally qualified to purchase the data; Requestor's stated purpose/use for the data; Date of application; Date application received; Basis for qualification (election, party, academic, journalist, etc.); Date of application fulfillment or denial; Status of application; Criteria used to select/exclude records for the extract; and Filename(s) and number of records provided in the extract.		
S26.2	Х		VoteCal must allow authorized SOS administrators and authorized county users to log the date, time, and administrator ID of activities and events related to processing and fulfillment of a PVRDR.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
\$26.3	X		VoteCal must provide authorized SOS administrators and authorized county users with a method to select voter registration records for inclusion or exclusion in a PVRDR extract based on multiple criteria, with the ability to specify a range or list where applicable, including: County of residence; City of residence; Zip code(s); Home precinct; Political party affiliation; Age (before or after a specified date of birth, or within a specified range of dates of birth); Gender; Language preference; Voting participation history; and Political district/jurisdiction (such as Congressional District, State Assembly District; County Supervisory District; local school district, etc.).		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S26.4	X		In fulfillment of a PVRDR, VoteCal must be able to produce an extract as a standard tab-delimited text file that includes the following data fields for each voter: County of residence; Full name; Residence address; Mailing address; Party affiliation; Phone numbers; Email address; Language preference; Gender; Home precinct; Date of registration; Place of Birth; Registration status; and Registration method.		
S26.5	X		In fulfillment of a PVRDR that requests inclusion of voter participation history for each voter, VoteCal must be able to produce an extract in multiple related tab-delimited text files that includes the following files/data: • Voter registration data (all fields identified in S26.4); and • Voting participation history, including each relevant election in which each selected voter has voted and the method of voting (i.e., vote-by-mail, early or in-person). The extracted files must include key data fields to appropriately relate/join the data in each file, so that the extracts can be imported into a relational database.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S26.6	X		In fulfillment of a PVRDR that requests inclusion of voter political district assignment for each voter, VoteCal must be able to produce a extract in multiple related tab-delimited text files that includes the following files/data: • Voter registration data (all fields identified in S26.4); and • Political districts to which each voter is assigned. The extracted files must include key data fields to appropriately relate/join the data in each file, so that the extracts can be imported into a relational database.		
S26.7	X		VoteCal must include the ability for authorized SOS administrators to insert one or more fictional registration records into each PVRDR extract to "salt" the data extract so that improper use of the data can be traced to the particular PVRDR data release.		
S26.8	Х		VoteCal must provide the ability to record the salted record(s) associated with each PVRDR.		
S27			SOS PROCESSES: Jury Wheel Extracts		
S27.1	X		VoteCal must provide authorized SOS administrators and authorized county users with a method to select voter registration records for inclusion or exclusion in a Jury Wheel extract based on multiple filtering criteria, with the ability to specify a range or list where applicable, including: • County of residence; • City of residence; and • Political district/jurisdiction (such as Congressional District, State Assembly District; County Supervisory District; local school district, etc.).		
S27.2	Х		VoteCal must be able to further select records based on a formula that starts with the Nth record and selects every Mth record thereafter, where "N" and "M" are variables provided by the applicant (e.g., select every 39 th record after record #17).		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S27.3	X		VoteCal must provide the ability for SOS administrators to track requests for Jury Wheel Extracts (JWEs), including: Requestor name and contact information; Requestor address; Requestor specifications for the extract; Date of request; Date request received; Date request fulfilled (or denied); and Filename and number of records in the extract.		
S28		I	SOS PROCESSES: Affidavit Issuance Tracking		1
S28.1	X		VoteCal must allow an authorized SOS or county user the ability to record the issuance of blank voter registration affidavits to an individual or organization from SOS, including: The name and contact information of the person who requested and received the affidavits; The name of the organization if any; The date of issuance; and The range of affidavits issued.		
S28.2	Х		VoteCal must provide a method for an authorized SOS or county user to input a specific affidavit number and determine the person or organization to which the affidavit was issued.		
S29			SOS PROCESSES: Public Access Website		
S29.1	Х		VoteCal must provide a public website for voters to verify the status of their voter registration and other election related information without compromising private information.		
S29.2	X		For privacy purposes, the VoteCal public website must require an individual accessing the website to provide sufficient personal identification data to prevent others from accessing that voter's data and must not provide or confirm any private information.		

Req. #	S	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S29.3	X		 The VoteCal public website must allow a voter to determine: Whether he or she is registered to vote; Whether or not voter is registered as a permanent vote-by-mail or mail ballot voter; Political party affiliation; and His or her eligibility to vote in an upcoming election. 		
S29.3. 1	X		 VoteCal public website must support on-line voter registration capability, including the ability to: Send a request for verification of voter identity and eligibility to DMV and process the result returned; Submit request to DMV for DL/ID signature image and apply the returned images as the official signature image for registration purposes; and Automatically apply the voter registration update and send notice to the applicable county or counties. 		
S29.4	Х		The VoteCal public website must allow a person to determine the assigned polling place for a residence address in a county supported by the VoteCal EMS.		
S29.5	Х		The VoteCal public website must allow voters who have voted a provisional ballot to determine if their ballot was counted and, if not, the reason it was not counted.		
S29.6	Х		The VoteCal public website must allow voters who have requested a vote-by-mail ballot or voted a vote-by-mail ballot to determine the status of that ballot in compliance with EC §3017(c).		
S29.7	X		The VoteCal public website must conform to the style guide provided by the Secretary of State. Refer to the Bidder's Library for SOS style guide.		

Req. #	s	1	Mandatory VoteCal System and Independent County Uploading Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
S29.8	X		The VoteCal public website must be fully accessible for voters with disabilities; e.g., Americans with Disabilities Act (ADA) Levels 1 & 2 compliant, U.S. Rehabilitation Act including Section 508, Subpart B Priority 1 and 2 level checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0 "AA" Conformance Level) developed by the World Wide Web Consortium (W3C).		
S29.9	X		All VoteCal web pages and functions provided to meet these requirements must be available in English as well as other languages required by the Voting Rights Act, EC §2300(a)(8) or that are deemed necessary by the Secretary of State for language minority groups. These languages currently include Spanish, Chinese, Japanese, Korean, Tagalog, and Vietnamese. (SOS will be responsible for providing the required translations.)		

Table VI.2 – VoteCal EMS (VoteCal System and Election Management System) Business Requirements, Functionality Reference, and Requirement Response Form

For Bidders proposing VoteCal EMS, all VoteCal System business requirements and the requirements in the following table are mandatory and must be addressed by the proposed solution. Bidders that are deemed non-responsive in one or more of the requirements listed in Table VI.2 will receive no score for the entire VoteCal EMS portion of their proposal.

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E1	GENERAL REQUIREMENTS & FEATURES		
E1.1	The centralized VoteCal EMS application must be web based, compatible with Internet Explorer (IE) 6.0 or higher and Firefox v1.5 or higher browsers. The application must be implemented in a manner that automatically ensures users are always using the most current approved version of software code.		
E1.2	The centralized VoteCal EMS must be implemented in such a manner that the official copy of all associated data is maintained in the central VoteCal EMS databases.		
E2	VOTER REGISTRATION: Registrant Search		
E2.1	VoteCal EMS must allow an authorized user to query an existing registered voter in the system for update using a variety or combination of the criteria identified in Requirement S3.1.		
E2.2	VoteCal EMS must allow an authorized county user to select a registrant returned from a search to update the entire record as a reregistration. If the selected registrant is not a current resident of that county, The system must allow the county authorized user to update records that are not from their county but that are moving to their county. VoteCal EMS must provide a visual warning to the user before allowing the user to proceed with updating the record with a new registration in that county.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E3	VOTER REGISTRATION: Registration Processing		
E3.1	VoteCal EMS must provide the ability to display potential matches sorted, listed and classified (such as color coding) based on the state-defined confidence rating of the potential matching criteria.		
E3.2	VoteCal EMS must allow the authorized county user to view all data, including historic voting activity data, historic voting participation data, historic affidavit images and historic signature images for any of the potential matching registration records returned without leaving the voter registration add/update function.		
E3.3	VoteCal EMS must provide a warning to the user, before allowing the user to proceed with updating an existing registration record from another county as a re-registration in that county.		
E3.4	VoteCal EMS must allow the authorized county user to enter a registration as a new registration if the user determines that none of the potential matching records represents the registrant on the new voter application.		
E3.5	VoteCal EMS must allow an authorized county user to capture and store a voter's request for permanent absentee vote-by-mail status (including UOCAVA status) during the processing of the registration affidavit, without leaving the registration function.		
E3.6	VoteCal EMS must provide the capability for scanning and storing an image of the full voter registration affidavit in both a batch and an individual scanning basis and must provide the ability to display and print the voter's signature from the affidavit as a separate image. (Note: the location of the voter's signature varies with the type of affidavit.)		
E3.7	VoteCal EMS must provide a method for authorized county users to associate the affidavit and signature images to the actual voter registration record.		
E3.8	VoteCal EMS must provide the ability to adjust contrast and skew of the individual stored affidavit and signature images.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E3.9	VoteCal EMS must provide the authorized county user with the ability to generate a notice to the voter on a local printer, both individually and in batch mode, of the failure to register the voter based on the notice from SSA that the voter is deceased. VoteCal must provide SOS Administrators and authorized county users with the ability to establish and modify the text and format of this notice.		
E3.10	VoteCal EMS must provide the ability for an authorized user to record contacts and attempted contacts to notify a voter of the SSA response and the suspension of registration.		
E3.11	VoteCal EMS must allow the authorized county user to clear any system flag indicating need to generate written notice of registration failure once contact is made with the voter.		
E3.12	VoteCal EMS must validate the residence address of new registrations against existing valid addresses in the system based on business rules. Registrations with invalid residence addresses, including commercial addresses identified as non-eligible for voter residence, must be flagged for county follow-up and resolution, and an electronic notice sent to the appropriate county for investigation.		
E3.13	VoteCal EMS must provide the authorized county user with the ability to generate a notice to the voter on a local printer, either individually or in batch mode, of the failure to verify the provided DL/ID or the assignment of an alternate DL/ID. VoteCal must provide SOS Administrators and authorized county users with the ability to establish and modify the text and format of this notice.		
E3.14	VoteCal EMS must provide the ability for an authorized user to record contacts and attempted contacts to notify a voter of failure to verify the voter supplied ID.		
E3.15	VoteCal EMS must allow the authorized county user to clear any system flag indicating need to generate written notice of ID verification failure once contact is made with the voter.		
E3.16	VoteCal EMS must display a positive confirmation that the record was saved/updated if there are no errors with the record, together with the VoteCal UID assigned to that registration and the registration status of the application.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E3.17	VoteCal EMS must identify all errors found with the record and prompt the user either to correct the errors or to save the record with a "pending" status for resolution and correction of fatal errors.		
E4	VOTER REGISTRATION: "Motor Voter"		
E4.1	VoteCal EMS must provide authorized county users with the ability to generate written notice to a potential voter of a DMV COA transaction failure either a) on an individual or batch basis to a user-identified local print device or b) to extract necessary data in an electronic format for import and use by a third-party.		
E5	VOTER REGISTRATION: Voter Notification Cards (VNC)		
E5.1	VoteCal EMS must provide authorized county users the ability to print a single VNC for a voter on a designated local printer upon successful "save" of a new registration or of an updated voter registration with a change in name, address, partisan affiliation, precinct assignment or political district assignment.		
E5.2	Vote Cal EMS must provide authorized county users with the ability to select and print VNCs in batches to a user-identified local printer.		
E6	LIST MAINTENANCE: General		
E6.1	VoteCal EMS must provide a method for authorized county users to update voter registration data as required based on information received in a variety of manners (such as written correspondence from the voter, telephone contact from the voter, written notice of reregistration in another state from that state, etc.) and to record the basis for that registration update, as well as to record other list maintenance activities conducted with respect to the voter in the voter activity history.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E6.2	 VoteCal must allow authorized county users to cancel registration of a voter for any of the following reasons and note the reason code for the cancellation in accordance with EC §2201, including: At the signed, written request of the voter; Legal determination that the voter is mentally incompetent (EC §2208 – 2211); Upon proof that the voter is imprisoned or on parole for conviction of a felony; Upon production of a certified copy of a legal judgment directing cancellation; Upon the death of the voter; Upon official notification that the voter is registered to vote in another State; and Upon proof that the person is otherwise ineligible to vote. 		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E6.3	 VoteCal EMS must provide authorized county users the capability to display two voter registration records simultaneously for users to view and resolve any pending issues with voter registration activity, including: Registrations in pending status due to absence of required information; Registrations in pending status due to inability to resolve address and precinct the voter; Potential duplicate registrations; Potential matches to registrants that have registered in another jurisdiction; Potential matches with CDCR felony records or DHS death records; Potential matches with DMV registration or change of address transactions; Potential matches with NCOA address change transactions; and ID verification issues with respect to a voter. (Data to be displayed include voter registration data, voter registration activity, voting participation history, images of the voter signature and the voter affidavit for potential matching or duplicate records for simultaneous comparison.) 		
E7	LIST MAINTENANCE: Pre-Election Residency Confirmation Postcards (RCPs)		
E7.1	Pursuant to EC §2220, VoteCal must provide the ability for authorized VoteCal EMS users to generate RCPs to all active registered voters in their county at least 90 days prior to a primary election. VoteCal must provide authorized county users with the ability to: Generate and print the RCPs on a batch basis, or to Extract necessary data in an electronic format for import and use by a third-party mailing house to generate and print the RCPs.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E7.2	VoteCal EMS generated RCPs must be bar-coded to facilitate the ready identification of the voter and expedited processing of returned RCPs.		
E7.3	 When RCPs are returned to the county by the postal service with a forwarding address in the same county, VoteCal EMS must: Allow the authorized county user to update the residence and/or mailing address of the registrant; and Note in the activity history for that registrant the basis for that update; VoteCal EMS must also allow the user to do any of the following: Print an individual VNC on a user-selected local printer; Flag the record for generation of a VNC during batch printing; Print an individual "Change of Address Notification" (CAN) on a user-selected local printer in accordance with EC §2225; or Flag the record for automatic generation and mailing of a CAN during batch printing. 		
E7.4	 When RCPs are returned to the county by the postal service with a forwarding address in a different California county or outside of the State, VoteCal EMS must: Allow the authorized county user to record the return of the RCP, automatically changing the status of the registrant to "inactive"; Must automatically note in the activity history for that registrant the basis for that update and the forwarding address indicated by the postal service; VoteCal must also allow the user to do any of the following: Print an individual CAN on a user-selected local printer; Flag the record for generation of a CAN during batch printing; Print an individual NVRA 8(d)(2) notice; or Flag the record for generation of a NVRA 8(d)(2) notice during batch printing. 		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E7.5	 When RCPs are returned to the county by the postal service as undeliverable with no forwarding address, VoteCal EMS must: Allow the authorized county users to record the return of the RCP; Automatically changing the status of the registrant to "inactive"; and Note in the activity history for that registrant the basis for that update and the lack of forwarding address indicated by the postal service. 		
E8	LIST MAINTENANCE: Change of Address Notification (CAN)		
E8.1	VoteCal EMS must provide a method for authorized county users to generate and print, on an individual or batch basis, Change of Address (CAN) notices to all registered voters for whom the jurisdiction has received a third-party notice of address change (e.g., returned RCP, NCOA match or returned Sample Ballot with address correction) in accordance with EC §2225.		
E8.2	VoteCal EMS must allow authorized county users to update the voter's record upon the return of a CAN, noting that return in the voter's activity history, and updating the voter record according to the following rules: • If the returned CAN indicates an address change within the same county, the voters registration record will be updated to the new address and flagged for creation of a VNC; and • If the returned CAN indicates that the voter has moved to another county or another state, the voter's registration record will be cancelled.		
E 9	LIST MAINTENANCE: Other Address Correction Activities		
E9.1	VoteCal EMS must provide a method for authorized county users to update the voter record based on information received from returned sample ballots in accordance with EC §2223.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E9.2	VoteCal EMS must provide the ability for authorized county users to generate and print, on an individual or batch basis, Alternate Residence Confirmation Postcards (ARCP) to all appropriate voters. The batch must select active registered voters that have not voted in an election, and who have not updated their political affiliation, name or address within the past four years, in accordance with EC §2224.		
E9.3	VoteCal EMS must provide the ability for authorized county users to generate and print, on an individual or batch basis, NVRA 8(d)(2) notices to all appropriate voters for whom the county has received third-party notice of a voter's change of address.		
E9.4	VoteCal EMS must provide the ability for an authorized county user to update the voter's record upon return of an ARCP or NVRA 8(d)(2) notice, automatically noting in the voter's activity history the basis for that update.		
E10	PRECINCTS AND DISTRICTS: Address Tables		
E10.1	 VoteCal EMS must provide authorized county users with the capability to view and maintain Address and Street Index data for their county, including the ability to: Search and locate existing address records within the system; Enter new street/address ranges; Delete new street/address ranges that have been entered in error; Edit and inactivate existing street/address ranges; Extend an existing street/address range; Split existing street/address ranges into one or more separate ranges; Define address/street ranges as odd or even; Identify address/street ranges as commercial or otherwise invalid for a voter residence; Designate addresses as multiple family dwellings (e.g., nursing home, homeless shelter, apartment building); and Assign street addresses and ranges to specific home precincts. 		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E10.2	VoteCal EMS must provide the ability for authorized county users to define multiple commonly understood "aliases" to an official street name or city name, so that entry or search of the alias street or city name throughout the system will automatically be corrected to the official name.		
E10.3	VoteCal EMS must automatically update and reassign voters to new home precincts as existing street/address ranges and home precinct assignments are modified and must provide warning and display any voters who are orphaned (without a valid home precinct assignment) as the result of modifications to existing street/address ranges and home precinct assignments and must prompt the user to correct/resolve such errors.		
E10.4	VoteCal EMS must be able to support large residential complexes that have a single street address, but many buildings and units that are potentially dissected by a district or precinct boundary.		
E10.5	VoteCal EMS must retain history when an Address Library entry is modified or inactivated. For example, if a street is renamed or a change in precinct or district boundaries results in Address Library records being changed, reports that are generated with an "as of" date prior to the change must utilize data that existed on the "as of" date in the Address Library, District and Precinct records, and Voter Registration records.		
E10.6	VoteCal EMS must allow archival and purging of address/street ranges that have been inactivated on or before a certain date.		
E10.7	VoteCal EMS must be able to process the special situation when a highway, road, or street is on or forms a boundary between two counties, with addresses on one side of the road being in one county (known by one street name) and addresses on the other side of the road being in the second county (known by a different street name). This accuracy must extend to the conversions of existing Address Libraries and addresses from existing county systems to the new statewide VoteCal database.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E10.8	VoteCal EMS must provide an audible warning and display visual notice when an authorized county user invalidates (e.g., designated change from residential to commercial) an address or address range if there are voters in the database with residence addresses within the range that the user is attempting to invalidate.		
E10.9	VoteCal EMS must prevent deletion or inactivation of an address or address range by an authorized county user if there are voters in the database with residence addresses within the range that the user is attempting to invalidate.		
E10.10	VoteCal EMS must provide an authorized user with an audible warning and visual notice when a residence address the user is entering for a voter does not exist or if the address library indicates that the address is not valid for a voter residence address. In such instances, the VoteCal EMS must allow authorized county users to take any one of the following actions: Correct the invalid address; Store the voter Registration record in Pending status until an authorized user resolves the conflict between the voter's address and the Address Library; or Enter the address as a "non-standard" address and allow the registration to be processed with manual assignment of the voter to a home precinct.		
E11	PRECINCTS AND DISTRICTS: Precinct – District Mapping		
E11.1	VoteCal EMS must have the ability to recalculate the active registered voter total by district or precinct when new registered voters are added to help meet statutory size requirements.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E12	PRECINCTS AND DISTRICTS: Home Precinct Management		
E12.1	VoteCal EMS must provide the ability for authorized county users to view and maintain precinct definition data for their county, including the ability to: • Add new home precincts; • Modify existing precincts; • Inactivate existing precincts; • Split existing precincts into sub-precinct components ("split precincts"), to accommodate political district boundaries that cross an existing home precinct; and • View the count of voters associated with each home precinct or split precinct.		
E12.2	VoteCal EMS must provide authorized county users with the ability to re-assign voters to the appropriate home precinct during the process of adding, modifying (including splitting) and inactivating home precincts.		
E12.3	VoteCal EMS must provide authorized county users with the ability to apply mass changes, and reassign groups of registered voters (such as all voters in specified precincts or all voters within specified street name or street address ranges) to a new or different home precinct.		
E13	PRECINCTS AND DISTRICTS: Political District Management		
E13.1	VoteCal EMS must provide the ability for authorized county users to view and maintain political jurisdictions/districts within their county, including: US Congressional districts; State Senate districts; State Assembly districts; Board of Equalization districts; County Supervisorial districts; and Cities and unincorporated areas.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E13.2	VoteCal EMS must provide the ability for authorized county users to create and maintain all necessary local districts and trustee levels within districts, such as census tracts, school board, municipality, public utilities, etc.		
E13.3	 VoteCal EMS function must have a method for authorized users to: Define and add new districts; Modify existing districts; Inactivate existing districts; Assign home precincts to districts within the county; Assign districts to a home precinct; and Method to split or combine existing districts, automatically reassigning home precincts associated with the original district(s). 		
E13.4	VoteCal EMS must allow authorized county to specify a maximum number of voters allowed for a home precinct. VoteCal EMS must provide warning when the number of voters in a home precinct exceeds that limit.		
E13.5	VoteCal EMS must provide the ability to define a single district (such as a Congressional District) as "county-wide" so that the district is automatically assigned to all home precincts within the county.		
E13.6	VoteCal EMS must provide the ability for authorized users to designate a category of districts as "required" so that each and every home precinct must be assigned to one of the available districts within that category.		
E13.7	The VoteCal EMS must provide an audible warning and display visual notice of any home precincts that are orphaned without the required district assignments as the result of modifications to district definitions, and must allow the authorized county user the ability to correct/resolve such errors.		
E13.8	VoteCal EMS must provide authorized county users with the ability to apply mass changes, and reassign groups of registered voters (such as all voters in specified precincts or all voters within specified street address ranges) to a new or different political district.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E13.9	VoteCal EMS must provide authorized county users with the ability to automatically re-assign home precincts and associated voters to political districts during the process of adding, modifying (including splitting) and inactivating districts.		
E13.10	VoteCal EMS must prevent inactivation of a political district if it is associated with any active home precinct records or any registered voters.		
E14	ELECTION MANAGEMENT: Election Definition		
E14.1	VoteCal EMS must allow authorized county users to manage multiple open elections to accommodate situations where one or more elections are in the planning stages, while other elections are in process and have not completed the canvass.		
E14.2	VoteCal EMS must allow authorized county users to define and manage the county component of statewide elections, consolidated UDEL elections, and all regular and special local elections that may be countywide or specific to jurisdictions, storing all relevant data associated with a particular election, including: • Election name; • Election date; • First day for vote-by-mail ballots; • Close of registration; and • Type of election (e.g., special, primary, general, or recall).		
E14.3	VoteCal EMS must provide the ability for authorized county users to select the applicable districts specific to an election, including the ability to add a district when a district is omitted in error after the initial election set-up.		
E14.4	VoteCal EMS must allow authorized users to re-use election set-up information as a "template" for the creation and definition of current elections.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E15	ELECTION MANAGEMENT: Contest/Office Management		
E15.1	VoteCal EMS must allow authorized users to define and manage the contests and offices associated with an election.		
E15.2	VoteCal EMS must allow authorized county users to define elected offices within their county such that the elected office definitions may be used as a template to define the actual contests in a given election.		
E15.3	VoteCal EMS must allow authorized county users to specify key properties of an elected office, including: Term of office; Associated ballot heading, in accordance with EC §13109; Normal schedule for election; Number to be elected; Partisan or non-partisan; Whether or not the candidates for the office are subject to rotation rules in accordance with EC §13111, or with EC §13113, and which rotation rule applies; Whether the elected office is subject to the state random alphabet or the local random alphabet for determining order on the ballot; Associated political district (e.g., congressional district, city, county Supervisorial district, school board, etc.); Candidate filing requirements including forms, fees, number of petition signatures required, and value of signatures-in-lieu; and		
E15.4	VoteCal EMS must provide the ability for authorized county users to define the ballot headings that appear in an election, as well as the order of contests, in accordance with EC §13109.		
E15.5	VoteCal EMS must provide the ability for authorized county users to define the actual contests in a specific election automatically, using the template of elected offices defined within the system and, if necessary, modifying and deleting the populated "template" contests.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E15.6	 VoteCal EMS must provide the ability to create contest definitions on an ad hoc basis for an election to include: Number of seats up for election (e.g., "Vote for Two"); Applicable political district; Whether the contest is partisan or non-partisan; In primary elections, whether or not non-partisan voters can vote for that contest; Modification of base year for term calculations; Whether or not the candidates for the office are subject to rotation rules in accordance with EC §13111, or with EC §13113, and which rotation rule applies; Whether the elected office is subject to the state random alphabet or the local random alphabet for determining order on the ballot; Whether the contest is a primary, general, runoff or recall election, etc; Whether or not the contest actually appears on the ballot (for instances where there are insufficient candidates); and Whether this is a state-certified office. 		
E15.7	VoteCal EMS must have the capability to associate partisan contests in a primary election with the appropriate contest in a general election such that the designated winners of the primary contest automatically populate the general election contest as candidates.		
E15.8	VoteCal EMS must provide the ability to define all ballot measures for an election, including those that are statewide, countywide, and those that are specific to political jurisdictions within the county, including designation of ballot headings.		
E16	ELECTION MANAGEMENT: Candidate Management		
E16.1	VoteCal EMS must be capable of defining the candidates for an office and managing the qualification process for each candidate.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E16.2	VoteCal EMS must provide the ability to capture all required data for		
	each candidate, including:		
	Full candidate name;Office for which the candidate is running;		
	Candidate's party affiliation;		
	Candidate ballot name;		
	Ballot designation;		
	Candidate address and contact information; and		
	Candidate incumbency.		
E16.3	VoteCal EMS must provide the ability for authorized county users to designate a candidate as the winner of that contest.		
E16.4	VoteCal EMS must allow authorized county users the ability to define		
	and print the various forms required for filing by a candidate, merged		
	with the required data for that candidate. The format and content of		
	each form must be customizable for each office by an authorized county user.		
E16.5	VoteCal EMS must provide the ability for authorized county users to		
	verify a candidate's voter registration record including residence		
	location (within a district), party affiliation history, and signature image,		
	without having to leave the candidate entry function.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E16.6	 VoteCal EMS must provide authorized county users the ability to enter, update, or view all aspects of the candidate qualification process for each individual candidate, including: Filing of each required document, date of the filing and sufficiency of the filing; Statement of qualification filing date, printing fee payment and language designations for printing; Payment of filing fees, date and method of payment, and calculation of remaining balance, if any; Number of nomination signatures submitted and number of signatures verified and approved; Number of signatures submitted in lieu of filing fees, and number of such signatures verified and approved; Date of qualification for ballot; and Date of data transmission to State for candidates for State certified offices. 		
E17	ELECTION MANAGEMENT: Ballot Definition		
E17.1	VoteCal EMS must be capable of determining the required ballot styles for an election, as well as the contests and candidates—in proper order—appropriate to each ballot style.		
E17.2	VoteCal EMS must provide the ability for authorized county users to enter the results of the statewide random alphabet drawing for an election.		
E17.3	VoteCal EMS must determine the appropriate order of each candidate in a contest that is subject to the application of rotation rules based on the statewide random alphabet, pursuant to the provisions of EC §13111.		
E17.4	VoteCal EMS must provide the ability for authorized county users to enter the results of the county random alphabet drawing for an election.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E17.5	VoteCal EMS must determine the appropriate order of each candidate in a contest that is subject to the application of rotation rules based on the county random alphabet, pursuant to the provisions of EC §13111(e).		
E17.6	VoteCal EMS must provide authorized users the ability to export the ballot definitions for each ballot style in multiple formats for use by ballot printers and voting system applications to create ballot designs and layouts. Export formats must include MS Excel, XML and tabdelimited text files.		
E18	ELECTION MANAGEMENT: Voting Precinct Definition & Voter Assignment		
E18.1	VoteCal EMS must provide authorized users the ability to define voting precincts for a specific election based on the home precincts, portions, or combinations thereof, and to assign voters to those voting precincts.		
E18.2	VoteCal EMS must allow authorized county users with the ability to define association of home precincts/precinct parts into voting precincts ("consolidations") based upon assignments in a previous election or upon a default or template configuration.		
E18.3	VoteCal EMS must provide authorized users with the ability to determine the number of voters assigned to each voting precinct, broken down by vote-by-mail (permanent/UOCAVA and non-permanent) and non-vote-by-mail voters to assist in the definition of voting precincts and broken down by partisan affiliation.		
E18.4	VoteCal EMS must provide and display a running total of the voters assigned to a voting precinct.		
E18.5	VoteCal EMS must provide authorized county users the ability to define a precinct as "all mail ballots" in accordance with EC §3005, §4000 et.seq., or §12225.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E19	ELECTION MANAGEMENT: Ballot Ordering		
E19.1	VoteCal EMS must be able to calculate and generate orders for ballots and sample ballots, by voting precinct or ballot style (including alternate languages where separately printed), for an election. The VoteCal EMS must automatically base the order on current registered voters, taking into account registration status (active and inactive) and vote-by-mail/mail ballot status, adjusted based on authorized county user input of such factors as: • Additional allowance (percentage and count) for sample ballots; • Additional allowance (percentage and count) for vote-by-mail/mail ballots; • Percentage of voters who are not mail-ballot/permanent vote-by-mail in a voting precinct for calculating precinct ballots; • Minimum quantity for any precinct or ballot style of sample ballots, precinct ballots and vote-by-mail/mail ballots; • Round up factor for packaging or "padding" (e.g., "bundled in pads of 25 ballots"); • Number of required test ballots for each precinct/ballot style; • Ballot numbering sequence; and • Whether or not to print ballots for a voting precinct with no registered voters.		
E19.2	VoteCal EMS must allow an authorized county user the ability to manually override and adjust the quantity of ballots ordered for any precinct or ballot style before the order is finalized.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E20	ELECTION MANAGEMENT: Polling Place Management		
E20.1	VoteCal EMS must provide the ability of authorized users to enter the properties of each polling place, including: Polling place name; Facility address; Facility rental fees; Room number or location; Facility contact information; Property owner contact information; Polling place emergency contact for election day; Payee information; Telephone and internet access; Election day phone number; Historic record of the elections that have used the polling place; Five county customizable fields; ADA accessibility indicator (for special printing on sample ballot mailing); and		
E20.2	County notes and comments about the polling place. VoteCal EMS must provide the ability of authorized users to assign voting precincts to actual polling places for an election. This must include the capability to designate a polling place for early voting (all precincts/ballot styles) and to designate multiple voting precincts within the same polling place.		
E20.3	VoteCal EMS must allow authorized users to record polling place facility characteristics for compliance with the Americans with Disabilities Act and the Accessibility for the Elderly and Disabled Act.		
E20.4	VoteCal EMS must provide the capability to attach or incorporate at least ten (10) graphic images in PDF, GIF, or JPG format to the record of each polling place.		
	VoteCal EMS must provide capacity to store an average of five 1MB images per polling place.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E21	ELECTION MANAGEMENT: Election Worker Management		
E21.1	VoteCal EMS must provide the ability for authorized county users to define "roles" for election workers (e.g., Precinct Captain, Precinct Worker, Roving Support, Technical Support, Help Desk, etc.).		
E21.2	VoteCal EMS must provide the ability for authorized county users to add and update election workers in the system, and to capture, edit and display key information about those election workers, including: Name; Address; Contact information (phone number, email address, fax number); Partisan affiliation; Indication if election worker is a student, county-worker, volunteer, etc. Alternative language capability; Worker preference with respect to job assignments; Other special skills; Special needs; "Do Not Hire" indicator; Default role and polling place assignment; Current and historic participation in training; Current and historic role assignments; Current and historic voting precinct assignments; Current pay rates; Five county customizable fields; and		
E21.3	General comments about poll worker and performance. VoteCal EMS must allow authorized county users to assign election workers to a specific role and to a specific polling place, or group of polling places, for a specific election.		
E21.4	polling places, for a specific election. VoteCal EMS must provide an authorized county user with the ability to determine if an election worker is a registered voter in the State of California without leaving the election worker management function.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E21.5	VoteCal EMS must provide authorized county users with the ability to enter and manage data on election workers who are not registered		
	voters (such as students), as permitted by California law EC §12302.		
E21.6	VoteCal EMS must allow authorized county users to define the roles		
	and associated pay rates and mileage rates for that county.		
E21.7	VoteCal EMS must allow authorized county users with the ability to		
	record the actual work (e.g., role, pay rate and hours, etc.) performed		
E21.8	by election workers, including volunteers. VoteCal EMS must allow authorized county users with the ability to		
EZ1.0	define and edit the training sessions for that county, and to assign poll		
	workers to those training sessions.		
E21.9	VoteCal EMS must allow authorized users in one VoteCal EMS county		
	to view election worker information in any other VoteCal EMS county.		
E21.10	VoteCal EMS must provide the capability for authorized county users		
	to generate election worker compensation data extracts on demand for		
E21.11	transmission to county payroll offices for processing. VoteCal EMS must provide notification to the county if an election		
L21.11	worker's voter registration is cancelled and the election worker has		
	been assigned to work at a polling place for a pending election.		
E21.12	VoteCal EMS must provide authorized county users with the capability		
	to copy election worker information from one election to another.		
E22	ELECTION MANAGEMENT: Vote-by-Mail Voter Application Management		
E22.1	VoteCal EMS must provide the ability for authorized county users to print vote-by-mail or permanent vote-by-mail applications pre-filled with relevant voter data, create an extract for third-party printing, and print of mailing labels for vote-by-mail or permanent vote-by-mail applications to all active registered voters in the county that are not currently designated permanent vote-by-mail voters. Printed applications and mailing labels must be bar-coded to facilitate the ready identification of the voter and expedited processing of a returned application.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E22.2	VoteCal EMS must provide the ability for authorized county users to locate a voter (manually, or automatically by barcode) and process an absentee voter application received in accordance with EC §3001, et. seq., and apply the request to the appropriate election only, including: • Date received; • Applicable election for which the request is made; • Address to which the ballot should be mailed; • If the application is for a primary election and the voter is non-partisan, the type of ballot requested; and • Whether or not the application was accepted and, if not, the reason denied.		
E22.3	VoteCal EMS must provide the ability for authorized county users to locate a voter record (manually, or automatically by barcode) and enter information from special absentee voter (military and overseas) applications received under UOCAVA and EC §3100, et seq., including: Date received; Address to which the ballot should be mailed; and Whether or not the application was accepted and, if not, the reason denied.		
E22.4	VoteCal EMS must provide the ability for authorized county users to locate a voter (manually, or automatically by barcode) and process permanent vote-by-mail voter applications received in accordance with EC §3200 et seq., including: Date received; Address to which the ballot should be mailed; and Whether or not the application was accepted and, if not, the reason denied.		
E22.5	VoteCal EMS must provide the ability for authorized county users to view a voter's registration information, including the name, address, mailing address, signature image, partisan affiliation, precinct, and ballot type, without leaving the application processing function.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E22.6	VoteCal EMS must allow authorized county users the ability to record issuance of a vote-by-mail ballot and the method of issuance while processing a vote-by-mail voter application.		
E22.7	VoteCal EMS must provide the ability for authorized county users to generate a written notice to all permanent vote-by-mail voters and voters in a designated "all mail ballot precinct" who are not affiliated with a qualified political party advising them of their right to vote a partisan ballot in a primary election and that allows the voter to request such a ballot in compliance with EC §3205. VoteCal EMS must provide the capability for the authorized county user to both a) generate and print the notices on an individual and batch basis to a user-selected local printer, and b) extract necessary data in an electronic format for import and use by a third-party to generate and print the notices.		
E22.8	VoteCal EMS must allow authorized county users to establish and update the content and format of that county's written notice to non-partisan permanent vote-by-mail/mail ballot voters of their right to vote a partisan ballot.		
E22.9	VoteCal EMS must enter automatically in a voter's record the date a notice has been generated or mailing data generated to a non-partisan permanent vote-by-mail/mail ballot voter, of their right to vote a partisan ballot, for a voter in accordance with EC §3205.		
E22.10	VoteCal EMS must provide the ability for authorized county users to cancel a voter's permanent or special vote-by-mail status when appropriate, and must allow the county official to note on the voter's record the basis for that cancellation.		
E22.11	VoteCal EMS must allow authorized users the ability to initiate a process to automatically cancel the permanent vote-by-mail voter status of all voters that have not voted in two consecutive statewide general elections, in accordance with EC §3206.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E23	ELECTION MANAGEMENT: Vote-by-Mail & Mail Ballot Management		
E23.1	VoteCal EMS must provide the ability for authorized county users to manage the mailing and return of vote-by-mail and mail ballots with respect to each voter, including capture or recording of the following information: • Date ballot sent to the voter; • Partisan affiliation of the ballot that was sent (primary elections only); • The style and precinct of the ballot that was sent; and • Any replacement ballot activity. VoteCal EMS must provide the ability for authorized county users to		
EZJ.Z	 initiate a process to generate and print mailing lists, mailing labels and ballot return envelopes for all eligible vote-by-mail, permanent vote-by-mail and mail-ballot voters for an election. For each voter, the list and mailing labels/envelopes must indicate: The appropriate ballot style (including partisan type), Home precinct, Voting precinct, Date of issuance, Date of election, and An indicator whether this is the first, second, third, etc. ballot issued to the voter. 		
E23.3	VoteCal EMS must provide the ability to generate an extract of the same information for printing and mailing by the county or a third-party contractor.		
E23.4	VoteCal EMS must allow counties to print customized text on vote-by-mail/mail ballot envelopes and ballot return envelopes.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E23.5	VoteCal EMS must provide the ability to exclude voters for whom a vote-by-mail ballot has already been sent, when generating mailing lists, mailing labels and ballot return envelopes to vote-by-mail/mail-ballot voters.		
E23.6	VoteCal EMS must provide the ability to print a bar code on vote-by- mail ballot return envelopes or mailing labels for automated processing, such as scanning a returned ballot to retrieve the appropriate record for automated processing of that ballot.		
E23.7	VoteCal EMS must provide the ability for authorized county users to initiate a process to generate a data extract, for printing and mailing by the county or a third-party contractor, of all eligible vote-by-mail voters and mail-ballot voters for an election in which the voters are qualified to vote. The process must provide the ability to exclude voters for whom a vote-by-mail ballot has already been sent.		
E23.8	VoteCal EMS must automatically update each voter's record with the date that a vote-by-mail ballot or mail ballot has been sent and the type of ballot sent.		
E23.9	VoteCal EMS must provide the ability for authorized county users to enter information from returned voted vote-by-mail ballots and mail ballots, and note in the voter's record the relevant information regarding that return, including: • Date ballot received; • Method ballot returned (e.g., mail, returned at county office, returned at polling place, etc.); • The reason for rejection, if rejected.		
E23.10	VoteCal EMS must provide the ability to read a printed barcode on the vote-by-mail or mail ballot return envelope to identify and display the correct data associated with the vote-by-mail or mail ballot.		
E23.11	VoteCal EMS must provide the ability for authorized county users to record the issuance of a second or subsequent vote-by-mail or mail ballot, and must automatically void all previously issued ballots to the voter to prevent the processing of multiple voted ballots for the same voter in accordance with EC §3014.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E23.12	VoteCal EMS must provide the ability for authorized county users to view the voter's registration signature image and view the voter registration record without having to leave the vote-by-mail ballot		
	function.		
E23.13	VoteCal EMS must provide the ability for voters to view the status of their vote-by-mail or mail ballot on a continual basis over a secure internet website, in accordance with EC §3017(c) until the conclusion of the canvass.		
E23.14	VoteCal EMS must provide authorized county users with a tool to process returned vote-by-mail/mail ballots on a batch basis and to account for all ballots in the batch, including identification of duplicates and exceptions.		
E23.15	VoteCal EMS must provide an audible warning and visual notification to authorized county users that are processing a returned vote-by-mail or mail ballot for a voter for whom such a ballot has already been returned and accepted for the same election.		
E23.16	VoteCal EMS must allow the authorized county user to "un-cancel" the appropriate previously cancelled ballot, after canceling all other issued and outstanding ballots in instances where vote-by-mail ballots have been reissued to a voter and an earlier, voided ballot is returned.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E24	ELECTION MANAGEMENT: Sample Ballot Mailing		
E24.1	VoteCal EMS must provide the ability for authorized county users to generate and print mailing lists, mailing labels and to actually print address information directly onto sample ballots for mailing sample ballots to all eligible voters for an election in which the voters are qualified to vote. The system must allow counties to include or exclude categories of mail ballot voters (e.g., permanent vote-by-mail, vote-by-mail, overseas, all-mail ballot precincts). The system must also allow the following information to be included in the list, mailing labels or sample ballot addressing: A barcode to identify and retrieve the voter's record; The voter's assigned polling place; The voter's voting precinct; A customizable message; The ballot style (including partisan type for primary elections only); and An indication whether the polling place is ADA accessible.		
E24.2	VoteCal EMS must provide the ability to generate an extract of the same information as listed in E24.1 for printing and mailing by the county or a third-party contractor.		
E24.3	VoteCal EMS must provide the ability to automatically record when a sample ballot has been sent, the type of sample ballot sent, and the date of mailing (generation) to prevent duplicate mailing of sample ballots to a voter.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E25	ELECTION MANAGEMENT: Provisional Ballot Tracking		
E25.1	VoteCal EMS must provide the ability for authorized county users to record the issuance and status of a provisional ballot to a voter, including: The provisional envelope number or other provisional ballot identification number (where provided); Whether or not the ballot was counted; and, If not counted, the reason for denial.		
E25.2	VoteCal EMS must provide the ability for an authorized county user, during processing of provisional ballots, to identify the voting precinct in which the voter should have voted and to update the voter's address without leaving the provisional ballot processing function.		
E26	ELECTION MANAGEMENT: Voting Participation History		
E26.1	VoteCal EMS must provide the ability for authorized county users to update voter participation history for each voter that voted in an election by any of the following input methods: Manual key input; By import from processing of vote-by-mail and mail ballots; By barcode from the precinct indices and roster-indices; and By electronic file input (e.g., from an electronic roster).		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E27	PETITION MANAGEMENT: General		
E27.1	VoteCal EMS must provide the ability for SOS authorized administrators to define statewide petitions for all county users, and must provide the ability for authorized county users to define petitions for candidates and local ballot measures, including: Petition number or identifier; Petition name; Petition type (initiative, referendum, recall, and candidate nomination and candidate petitions in lieu of filing fees); Number of signatures required; Number of candidates to vote for (in instances where a voter can sign a petition for more than one candidate for an office); Percentage or number of signatures required for random sample; Petition received date; Deadline for petition filing; Jurisdiction for the petition; Political party for partisan nominating petitions and petitions in lieu of filing fees; and Eligible partisan affiliations for signing the petition.		
E27.2	VoteCal must provide the ability to manage data for at least 100,000 "active" petitions in the system at any one time.		
E27.3	VoteCal EMS must provide the ability for authorized county users to record actual individual petitions sections submitted as part of that signature drive, including the number of signatures actually submitted on each such section as well as the start and end date of circulation for each section.		
E28	PETITION MANAGEMENT: Signature Verification		
E28.1	VoteCal EMS must include a random number generator that uses an SOS approved seed source to generate specific petition and line numbers for verification as a sample from the total of such signatures submitted.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E28.2	VoteCal EMS must provide the capacity for recording up to 20,000,000 registered voters as having been accepted or rejected as a signatory of an active petition.		
E28.3	VoteCal EMS must provide the ability, during entry and verification, for an authorized county user to search the database for and identify the voter registration record by name (including portions of names, smartnames and Soundex), and address, if any, for each signer. If the signer is not a registered voter, the VoteCal EMS must have the ability to record the challenge of that signature (petition section and line number) based on the lack of registration.		
E28.4	VoteCal EMS must determine and prominently display the voter's eligibility to sign the petition based on the dates of circulation of the petition section and the voter's registration status, partisan affiliation and residence within the appropriate jurisdiction at any time during the period of section circulation, once a signer has been identified.		
E28.5	VoteCal EMS must prominently display the voter's registration signature once a signer has been identified.		
E28.6	VoteCal EMS must provide the ability for an authorized county user to view the signer's voter registration data, including voting activity history and historical affidavit and signature images, without leaving the verification function.		
E28.7	VoteCal EMS must provide the ability for authorized county users to record the following information for each signature (section and line number) checked on a petition: Identity of the signer; Validity of the signature; and If invalid, the basis for rejecting the signature, including "signer not registered."		
E28.8	The VoteCal system must allow authorized SOS administrators and authorized county users with the ability to define and maintain signature rejection reasons and codes for use by the VoteCal EMS and county users.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E28.9	VoteCal EMS must automatically detect and provide both audible warning and visual notice to the county user if the voter whose signature the user is recording from a petition has already validly signed the same petition, and must automatically record that signature as invalid as a duplicate signature.		
E28.10	VoteCal EMS must automatically detect and provide both audible warning and visual notice to the county user if the voter whose signature the user is recording from a candidate petition has already signed a petition for another candidate in the same contest. In instances where a voter can vote for more than one candidate for an office and can, therefore sign petitions for more than one candidate for that office, the VoteCal EMS must automatically detect and provide both audible warning and visual notice to the county user if a voter has signed more than the allowed number of petitions for an office.		
E28.11	VoteCal EMS must provide authorized county users with an audible warning and visual notice when the minimum number of signatures has been verified as valid.		
E28.12	 VoteCal EMS must, for any petition, display upon request the following information: Number of sections submitted; Number of signatures submitted; Number of signatures required for petition to be valid; Number of signatures verified; Number of signatures determined valid; and Number of signatures rejected in the aggregate, and by category of rejection reason (e.g., duplicate signatures, not registered, invalid address, etc.). 		
E28.13	VoteCal EMS must, for petition signatures collected in lieu of filing fees, automatically update the candidate's record with the value of the signatures accepted.		

Req. #	Optional VoteCal EMS Business Requirement	Proposed Solution Description	Supporting Literature or Documentation Reference
E28.14	VoteCal EMS must allow authorized county users the ability to edit and delete a previously recorded validation or challenge of a signature, and to automatically clear that record of the voter's signing the petition.		
E28.15	If it is subsequently required to validate 100% of the signatures on a petition, the VoteCal EMS must automatically recognize the signatures that have already been validated and only require county users to validate those remaining signatures.		
E28.16	VoteCal EMS must allow authorized county users to delete, after certification of the associated election, all record of voters that have signed a petition, in accordance with EC §2122.		
E29	REPORTING		
E29.1	VoteCal EMS Standard Report Requirement - Bidders must agree to develop the reports listed in Exhibit VI.6 as part of the VoteCal EMS solution. Bidder's response to this requirement must contain a discussion of what tools will be used to develop these reports and how end users will be able to access the reporting menus. All reports must be capable of: screen display, being paper printed on local printer, or being exported electronically (e.g., PDF, MS Word, Excel, and tabdelimited text files).		
E29.2	VoteCal must provide at least four (4) user customizable fields, such that the fields can be assigned names that the field names will automatically display with the field in the user interface and the data type can be configured by SOS administrators, for each of the following data sets:		
	 Polling Places; Election Workers; Candidates; Election definitions; and Petitions. 		

G. REPORTING STRATEGY

Bidders must provide a detailed description of their reporting strategy for the VoteCal System solution. This strategy must address the following factors:

- **Comprehensiveness.** The degree to which the reporting strategy meets all of the current and potential future reporting requirements of the system.
- **Elegance and Simplicity.** The use of common components to support reporting functions throughout the system, and the use of components for their normal purposes without excessive fragmentation of tasks.
- Performance. The ability of the reporting strategy to provide satisfactory turnaround on the creation of large or complex reports without degrading the performance of other system components and functions.
- Usability. The ease of use of the reporting strategy, including the ease with which staff can
 be trained to produce reports, the ability to modify existing reports and to add new reports by
 trained end users without programming support, and the degree to which the user interface is
 easy and intuitive without excessive manual tasks or complexity.
- Adaptability and Extensibility. The ability of the reporting strategy to support reporting requirements beyond those specified in this proposal without significant system modification.
- **Familiarity.** The use of commonly-used reporting tools or languages, and existence of sufficient qualified individuals so that personnel can be recruited and trained to perform reporting tasks, including both the generation of existing reports and the creation of new and modified reports.

H. VOTECAL ARCHITECTURE

Bidders must describe in detail the architecture they are proposing for the VoteCal solution. This will include high level diagrams showing major system components and their interrelationships and supporting diagrams and materials, to provide the SOS with a visual, as well as narrative, representation of the future VoteCal operating environment.

The following information must be included and will assist SOS in assessing the completeness and thoroughness of the architecture proposed:

- A visual and narrative discussion of the technical architecture being proposed to support the VoteCal system, including a component model that addresses the major components of the proposed solution (as required by the RFP, Section IV);
- Proposed server configurations and specifications;
- Network architecture, including connectivity and bandwidth requirements;
- End user (SOS departmental and county) workstation configuration specifications and requirements;
- A discussion of logical and physical data security objectives and solutions;
- A discussion of how the Bidder will model and distribute its proposed environments (Production, Test, etc.) to support the business and technical requirements identified in Section VI, and to meet the Bidder's proposed deliverables;
- A discussion that supports each proposed environment's software (including platform components); the proposed web services, database(s), and interfaces(s)/integration connectivity to each interface identified in this RFP; and
- The proposed software components that will be used to satisfy the VoteCal system requirements, including software development tools, programming language(s), technology, software products(s) and version(s), DBMS, middleware, other software modules, utilities, and standard and ad hoc reporting software tools.

Factors to be included in this discussion are:

- **Comprehensiveness.** The degree to which the proposed architecture meets all of the functional and performance requirements of the RFP and business goals of the FSR.
- **Elegance and Simplicity.** The clarity and simplicity of the design, minimization of components, degree to which data and communications paths are direct and non-recursive, and hardware and software components are used for their normal, proven purposes without excessive fragmentation of tasks.
- **Flexibility.** The ability of the architecture to accept modifications to business rules and data elements and to extend functionality, capacity and performance at minimal cost and effort.
- County EMS Compatibility. The ease with which existing county EMS systems can be modified to use the required application program interfaces, and the ability for county users to employ the intrinsic user interfaces without excessive task duplication or complication.
- **Currency.** The use of actively marketed and developed hardware and software, and current business and technical practices and structures.
- **Interoperability.** The ease with which the system can exchange data or obtain services from external systems, and the appropriate use of independent national and international standards.
- Stability. The tolerance of the architecture for above-average workloads, and other abnormal stresses.
- **Maintainability.** The ability of the system to be maintained by personnel with commonly available skills; the use of easily obtained and hardware, and the ease with which necessary changes and updates can be applied to the system.
- Availability and Robustness. The ability of the architecture to deliver very high availability, including the tolerance for common system component failures and the ability to perform routine maintenance without interrupting service.
- **Disaster Recovery.** The ability to recover the system to full functionality with all data intact following an event that destroys or renders unusable the primary system facility at SOS.
- Security and Privacy Protection. Comprehensive mechanisms to prevent accidental or
 malicious use, destruction, of modification of system resources or data, and specific
 mechanisms, including but not limited to those required by applicable statute or regulation, to
 ensure that private and confidential data are not disclosed or exposed for disclosure to
 unauthorized entities.
- **Network.** The network solution provides sufficient bandwidth to support required and proposed performance, and is compatible with the other factors in this category.

I. TECHNICAL REQUIREMENTS

1. Technical Requirements and Response Format

This section contains the detailed technical requirements and response form (Table VI.3) that SOS requires of a proposed business solution to address the business processes described in Section IV. Bidders should remember that this is a "solution-based procurement," and that SOS is expecting Bidders to develop an appropriate solution to meet the business needs and these technical requirements.

Table VI.3 – VoteCal Technical Requirements and Response Form

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T1	SECURITY AND PASSWORDS		
T1.1	VoteCal access (including access to the optional VoteCal EMS) must be controlled by two-factor authentication, including user ID/password as one factor and either restricted physical access (e.g., to a specific workstation) or possession of a physical device (e.g., single-use password generator) as the second factor.		
T1.2	VoteCal access must provide a security function that allows the establishment of roles and allows SOS administrators to define the specific functions that can be performed by users assigned to each role.		
T1.3	Except where otherwise specified, SOS administrators must be able to be assigned access through defined SOS roles to data for all counties; authorized county users must be restricted to add, modify and delete data for their counties only.		
T1.4	VoteCal must provide the ability for delegated security administration, allowing SOS administrators to define county security administrators, who will have the ability to define county users with roles that give them permissions to perform functions within that county.		
T1.5	VoteCal must provide the ability to enforce strong passwords that include non-alphabetic and non-numeric characters of a minimum length that can be configured by SOS administrators.		
T1.6	VoteCal must allow SOS administrators to set and enforce the number of intervening passwords that must be used before a password can be reused by an authorized user.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T1.7	VoteCal must allow SOS administrators to force users to change password at next logon or at a prescribed interval (e.g., after XX days or XX number of logons).		
T1.8	VoteCal must enforce mandatory password changes after a specified number of days that can be configured by SOS administrators. VoteCal must provide a visual warning of imminent password expiration to authorized users at logon starting at a specific number of days prior to their expiration of their password that can be configured by SOS administrators.		
T1.9	VoteCal must provide the capability for SOS administrators and designated county security administrators to establish a specific expiration date for a user account.		
T1.10	VoteCal must provide the ability for SOS administrators to revoke a user's access to the system and, in such instances, must apply the revocation immediately, even if the user is currently logged onto the system.		
T1.11	VoteCal must provide SOS administrators the ability to configure the number of invalid logon attempts after which a user account is automatically disabled. For invalid logon attempts, VoteCal must display a generic error message that does not indicate the precise nature of the failed information. VoteCal must allow SOS administrators to configure the text message displayed for invalid logon attempts.		
T1.12	VoteCal must store user passwords in the system in an encrypted manner such that they cannot be viewed in plain text by any authorized user and must not be stored in any manner on the client side (e.g., cookies, hidden form elements, etc.)		
T1.13	VoteCal must allow SOS administrators to configure a timeout period such that inactive user sessions that exceed the timeout are automatically logged off VoteCal.		
T1.14	User authentication in the central environment shall be through a Lightweight Directory Access Protocol (LDAP) compatible directory		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T1.15	VoteCal must prevent data caching of confidential voter registration data on user systems.		
T1.16	All VoteCal servers must be hardened to industry standards; documentation of the hardening procedures must be included with the delivered system.		
T1.17	VoteCal must encrypt all data in transit using Secure Socket Layer (SSL) or 128-bit (or greater) RSA between servers and between servers and workstations, unless both servers are located within the trusted zones of the primary and secondary server facilities.		
T1.18	VoteCal must encrypt all private data whenever stored in non-volatile memory.		
T1.19	Virtualization may not be used for production servers.		
T1.20	The System must be designed and implemented to ensure that no VoteCal system component or combination of components will allow or facilitate access from one county environment to another or from non-VoteCal portions of the SOS environment to any county.		
T1.21	The system must be implemented so that all communications between SOS and counties must be encrypted on the source server or workstation and decrypted at the destination server or workstation.		
T1.22	The system must be architected so that the server or servers housing VoteCal cannot be accessed from the Internet even if other system components have been compromised.		
T1.23	No California voter registration data may be stored at any non- SOS facility unless modified so that actual voter information cannot be determined or inferred.		
T2	INTERFACES		
T2.1	All VoteCal interfaces with external systems must be implemented as service points except where that architecture is not compatible with the external system.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T2.2	All VoteCal interfaces must be implemented using XML; a removable converter must be used to communicate with non-XML partners.		
Т3	AVAILABILITY AND OPERATIONAL RECOVERY		
T3.1	VoteCal must be implemented so that the primary server equipment is housed at SOS, with a backup server environment installed at a physically remote state facility, such as the DTS Gold Camp Data Center. The equipment at the two facilities should be configured to support the required availability by establishing near-real-time synchronization of data between the two facilities		
T3.2	VoteCal must be implemented with full data replication and synchronization between two central server sites, so that all functions can continue without interruption in the event of the unavailability of any one site. The second site must be configured to support at least 50% of peak workload; however, the alternate site must be able to assume full peak capacity workload through the addition of hardware and/or software licenses only and within one day of the onsite availability of any required hardware.		
T3.3	VoteCal must be designed and tested to complete restoration to full, multi-site operation following the failure of any single site with no more than 12 hours of system unavailability.		
T3.4	VoteCal must be designed and tested to complete restoration to full, multi-site operation following the scheduled shutdown of any single site in less than one hour.		
T3.5	VoteCal must be designed and tested so that all central server system software and hardware maintenance can be performed at one site while the remaining site(s) continues in operation.		
T3.6	VoteCal must be designed and tested so that no routine process that requires system unavailability requires more than six (6) hours to complete and restore operation.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T3.7	VoteCal must be capable of operating for at least eight (8) weeks without interruption for routine scheduled activities.		
T3.8	The VoteCal System installation at the SOS facility must be supported by an online Uninterruptible Power Supply, permanently installed on the SOS raised floor server facility, capable of supporting continued, uninterrupted, operation of all VoteCal and optional VoteCal EMS equipment installed at SOS for at least 60 minutes without utility power.		
T3.9	The VoteCal system must provide the ability to export all software and data to fileshares on an external storage device provided by SOS so that the entire system can be restored from the exported data. Exported data must be refreshed at least weekly.		
T4	PERFORMANCE AND CAPACITY		
T4.1	VoteCal must ensure that routine transactions, including all user system activities functions involved in adding, deleting or updating a voter registration record, complete in less than one (1) second. Searches for records based on criteria that do not include the Unique ID must complete in less than two (2) seconds. VoteCal EMS functions not related to voter registration must complete in less than two (2) seconds. All performance requirements are exclusive of network transit time, to be measured at the external interface of the WAN boundary firewall. Performance requirements are also exclusive of the round-trip time for response from the DMV/SSA interface, also to be measured at the external interface of the wide-area network (WAN) boundary firewall.		
T4.2	VoteCal must support two thousand (2000) concurrent users, and must support peak usage of two hundred (200) routine transactions per second while meeting all other performance requirements previously stated.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T4.3	VoteCal must support up to thirty (30) million active, inactive and cancelled voters as implemented under this contract, and must support up to one hundred (100) million active, inactive and cancelled voters, while maintaining system performance within the tolerances specified in these requirements, with the addition of hardware, operating system and platform software licenses only. VoteCal must provide capacity for up to fifty (50) years of voter activity and voter participation history for each voter, and an average of ten (10) affidavit and signature images for each voter, with a maximum of at least one hundred (100) affidavit and at least one hundred (100) signature images for individual voters. VoteCal must support an average of ten (10) pages of attached document images (both as single and multiple pages within the image file) for each voter, with a minimum capacity of fifty (50) pages of attached document images for individual voters.		
T4.4	VoteCal must allow the ability to archive cancelled voter records older than an age specified when the archive process is run. An index of all archived records must be maintained so that archived records may be searched by name, date of birth and unique ID, and any or all such records restored to the database.		
T4.5	VoteCal must provide the capability to bulk archive and purge all documents images attached to voter records that are older than a specified date.		
Т5	PUBLIC INTERNET ACCESS		
T5.1	All public web pages must provide equivalent functionality, form and content through any internet browser product, including the current version and at least two integer releases, that is used by one tenth of one percent or more of the SOS public users, as measured at the www.sos.ca.gov site by Webtrends. Currently those products include MS Internet Explorer, Mozilla, Safari, Netscape and Opera.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T5.2	All public web pages must conform to the California Accessibility standards. These standards comply with California Government Code 11135 including Section 508 and the Priority 1 and 2 level checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0 "AA" Conformance Level) development by the World Wide Web Consortium (W3C). Bidders can download at California's Accessibility Standards (PDF)		
T5.3	All public web pages must accept application of a standard style guide without modification to the web pages.		
Т6	NETWORK		
T6.1	The Bidder must provide all network components required to connect the central servers to the SOS internal Ethernet LAN, and to a 10/100 Ethernet LAN demarcation at each county. The SOS currently operates a frame relay network to each county, with T1 local loops to the ten largest counties, and DS0 local loops to the remaining counties. The Bidder may propose to use this network, but must include all hardware, including routers, firewalls and Data Servicing Units/Channel Servicing Units (DSU/CSU); and any onetime installation costs for those components to upgrade the capacity of the network to meet the performance and capacity requirements of this RFP. SOS will be responsible for all public carrier activities and costs.		
T6.2	No VoteCal function except the public access website may be accessible over the Internet, unless presented through the use of secure Virtual Private Networks (VPNs) over the Internet.		
T6.3	The VoteCal network must be designed and tested so that network transit time for the average affidavit image is less than five seconds to any site. The VoteCal network must support this performance level for at least ten (10) image transactions per second from the ten (10) largest counties and from the SOS, and at least 0.5 image transactions per second for the remaining counties.		

Req.#	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T6.4	The VoteCal WAN must be implemented using dual firewalls to create DMZs at the two central facilities, with web servers located in the DMZ and all other servers behind it. Firewalls must be implemented at each county demarcation.		
Т7	CURRENCY AND PRODUCTIVE IN USE		
T7.1	All software components of VoteCal must be fully supported by their manufacturer, with no published end of life for any product.		
T7.2	All software development tools proposed for use in developing/ implementing of VoteCal must be fully supported by their manufacturer, with no published end of life for any product.		
Т8	DOCUMENTATION		
T8.1	VoteCal documentation must include complete system configuration and installation instructions so that all hardware and software components can be installed by an independent technician with appropriate skills.		
T8.2	VoteCal documentation must include complete records of all changes made to the system during the Maintenance and Operations period, including the specific change made and the reason for the change.		
T8.3	VoteCal documentation must include complete records of all incidents and problems reported or encountered during the Maintenance and Operations period, including the specific symptoms, the disposition of the problem, and reference to the specific documented changes that were made as a result of the problem.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T8.4	VoteCal documentation must include complete records of the system availability and all outages to any delivered system component or function during the Maintenance and Operations period, with specific reference to any incident or problem reports associated with each outage.		
T8.5	VoteCal documentation must include a complete inventory of all hardware and software components, including manufacturer, model or version, and any options or customizations		
T8.6	VoteCal must provide online access to the User's Manual.		
T8.7	VoteCal must provide functionality to enter and modify online documentation with no programming changes to the application and record who made the change and when.		
Т9	AUDITING REQUIREMENTS		
T9.1	VoteCal must log all user and system activity with the application, including logon attempts, errors encountered, records accessed, query search terms, standard reports generated and ad hoc report parameters (but not actual report contents or search results). Such system logs must contain sufficient information for authorized administrators to reliably reconstruct the chain of events and track them back to a specific user.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T9.2	VoteCal must capture and store for all changes of data, at the record and field level, the following information for audit and review: • Data that was changed;		
	 Prior value of the data before the change; Date and time of the change; Source of the change (down to actual user, where known to the system); and For changes from automated matching processes, the basis and confidence value of the match. 		
T9.3	VoteCal must provide a mechanism for authorized SOS administrators to search, view and print VoteCal audit log data that can be filtered and sorted by:		
	 Date (or range of dates); Jurisdiction (where applicable); Data field changed; Record that was changed; Source of the change (to the actual user when known to the system); and For changes from automated matching processes, the basis and confidence value of the match. 		
T9.4	VoteCal must provide the capability to archive and purge audit log entries prior to a given date.		
T9.5	VoteCal must be designed so that all audit log data is secure from manipulation and tampering.		
T9.6	VoteCal must be capable of receiving and storing audit log data regarding changes to voter registration data from independent county EMSs. VoteCal must provide a mechanism for SOS administrators to search, view and print audit data.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T10	CODING AND ERROR HANDLING REQUIREMENTS		
T10.1	All software must adhere to an SOS-acceptable industry standard for code development and error handling that is appropriate for the development and implementation environment.		
T10.2	Error handling routines must be implemented within VoteCal to trap all error messages.		
T10.3	VoteCal must log all system processing errors to a file, which must capture all relevant information for each error, including: • Date/time; • User name; • Stack trace information; • Module/source; and • Error description.		
T10.4	VoteCal must provide a mechanism for SOS administrators to search and review the error log.		
T10.5	VoteCal user interfaces must provide user error messages that clearly communicate the following to the user: Simple, clear explanation of the error; Identification of the source/location of the error (e.g., module, line number, error code, etc.) for troubleshooting by SOS and vendor support staff (VoteCal must allow this information to be suppressed in production environments); and What the user can do to correct the error (if applicable).		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T10.6	VoteCal must provide a mechanism for real-time alerts to SOS administrators and support staff (e.g., email, pager alert, etc.) of critical system failures and errors (not including user errors such as login failure and data entry error.)		
T11	TRANSITION		
T11.1	The Bidder must provide a mechanism, procedures and training to SOS for testing and evaluating data submitted from independent county EMSs after modifications to those EMSs.		
Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T12	HELP DESK		
T12.1	The Bidder shall provide telephone, email and web-based help desk support for problem resolution and troubleshooting for the duration of the maintenance period, per terms of the SOS approved Help Desk Support Plan.		
T12.2	The Bidder help desk support shall be staffed on a 24-hour basis seven days per week.		
T12.3	The Bidder shall provide appropriate software to log, manage, escalate, and resolve help desk problems, requested changes, system issues, etc., identified by VoteCal users, including SOS staff and county users and vendors.		
T12.4	The Bidder shall develop, provide and maintain documented help desk procedures for the VoteCal system and application environment, including help desk procedures that change due to application or program changes.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T12.5	The Bidder shall provide application training to all SOS help desk personnel on the use of VoteCal and any contractor help desk software.		
T12.6	The Bidder shall develop and provide written help desk troubleshooting procedures for the VoteCal system and application environment.		
T12.7	The Bidder shall be responsible for second-level (and above) help desk support. (SOS will be responsible for first level support of the application).		
T12.8	The Bidder shall report initial problem receipt and problem resolution to the SOS help desk.		
T12.9	The Bidder shall provide help desk monthly status reporting including, but not limited to, help desk staffing, call volumes, call duration (average and peak), call times, peak usage, call types, quality issues, and recommendations and shall develop and provide standard help desk reports to SOS, including monthly operational statistics reports and weekly incident reports to ensure the vendor has met appropriate help desk service level agreements.		
T12.10	The Bidder shall supply information to the SOS help desk on problems or events, including but not limited to, problem description, start and end dates/times, actual or potential cause(s), corrective action taken, and future action required.		
T13	REPORTING REQUIREMENTS		
T13.1	VoteCal must provide the capability for users to generate and print the reports identified in Exhibit VI.5.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T13.2	In addition to the reports identified in Exhibit VI.5, VoteCal must provide authorized users with up to 30 custom reports that will be identified and approved by county election officials and SOS staff during the detailed, technical design phase of the implementation project.		
T13.3	VoteCal must, where applicable for pre-defined reports, allow the user to configure report parameters for:		
	 Selecting data detail to include in the report; Constraining or filtering the data on which the report is based; and Establishing the data grouping and sorting for the report. 		
T13.4	VoteCal data must be appropriately indexed for rapid generation of all pre-defined reports.		
T13.5	VoteCal must provide the user with a visual "progress indicator" during data extraction and report generation, and must allow the user to cancel reports prior to completion.		
T13.6	VoteCal must, at user option, include the report parameters and report date in each report for pre-defined reports.		
T13.7	VoteCal must provide a general-purpose report writer that allows authorized users on an ad hoc basis to extract data from the VoteCal database and create formatted reports using the extracted data with user-defined sort criteria, filters, and subtotal/totals. (NOTE: a third party report writer to supplement any capabilities that are internal to the voter registration and election management software is acceptable).		
T13.8	The ad hoc report writer tool must present logical, pre-defined views on the data such that users can generate reports without understanding of the underlying technical data structure.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T13.9	The ad hoc report writer tool must allow authorized users to save custom defined reports for later re-use.		
T13.10	VoteCal must make all reports available for immediate generation and for batch generation.		
T13.11	 VoteCal must, for all reports, allow the user to: Preview/display the report on screen, instead of or prior to printing the report; Print the entire report or user selected page(s) to a user-selected printer in a local TCP/IP, Windows or Novell network environment; and Export the report data electronically to a user specified location, in multiple formats, including: Acrobat PDF, MS Word, MS Excel, and tab-delimited text file. 		
T13.12	VoteCal Reporting must provide the capability to print postcards or mailing labels of all or selected voters, filtered by any criteria stored in the database.		
T13.13	VoteCal must, at user option, sort and generate all address data for bulk mailings so that all addresses in the mailing list conform to US Postal Service standards, including CASS standards, and that the list is presorted to obtain optimal discounted postal rates.		
T14	GENERAL TECHNICAL REQUIREMENTS		
T14.1	VoteCal must provide tools to monitor the proposed solution system and database performance, including the ability to measure resource usage, identify component failure or degradation, and verify conformance to all specified performance requirements.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T14.2	Whenever possible, VoteCal graphical user interfaces shall employ entry tools such as default values, combo boxes that can select value based on successive character entry, check boxes, radio buttons, pick lists and context-sensitive right-click menus.		
T14.3	VoteCal must provide at least four (4) user customizable fields, such that the fields can be assigned names that the field names will automatically display with the field in the user interface and the data type can be configured by SOS administrators, for each of the following data sets: • Voters; • Precincts; and • Political districts.		
T14.4	VoteCal must provide a user interface that facilitates minimizing keystrokes during data entry.		
T14.5	VoteCal must provide an intuitive graphical user interface (GUI) using screen navigation via pointing device or keyboard at user option and use standard function keys across all components (e.g., F1 always is the same function).		
T14.6	(Requirement T14.6 deleted in previous addendum)		
T14.7	VoteCal must provide functionality to allow users to print screen information including application name and screen or function name.		
T14.8	VoteCal must provide functionality for data entry errors to be identified at the time of entry with descriptive and instructional messages in non-technical terms.		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T14.9	VoteCal must provide consistent menus and screens with a common look and feel throughout the application with a screen title and unique screen identifier on every screen.		
T14.10	VoteCal must provide a standard real-time processing indicator (e.g., the hourglass found in MS Word) that will enable the user to visually assess that the application is processing and not frozen.		
T14.11	VoteCal must provide comprehensive electronic context- sensitive help function that can be accessed both from the function in question and independently from a menu.		
T14.12	VoteCal must provide a Help table of contents, multiple (up to 99) index levels, and full text search.		
T14.13	(Requirement T14.13 deleted in previous addendum)		
T14.14	VoteCal must provide tools that manage solution module versions, relationships, and migration/environment statuses.		
T14.15	VoteCal must provide functionality to perform data sharing with MS Office tools, including functionality to extract data to MS Office or other applications.		
T15	VoteCal EMS TECHNICAL REQUIREMENTS – Applicable Only to Proposals that include an optional VoteCal EMS		
T15.1	(Requirement 15.1 deleted in previous addendum)		
T15.2	(Requirement 15.2 deleted in previous addendum)		

Req. #	Technical Requirement Text	Proposed Solution Description	Supporting Documentation or Literature Reference
T15.3	(Requirement 15.3 deleted in previous addendum)		
T15.4	(Requirement 15.4 deleted in previous addendum)		
T15.5	VoteCal EMS must support commercially available scanners, including alternatives for single-sheet and automated sheet feed scanners appropriate for low- and high-volume environments. The VoteCal EMS must support scanners from at least two independent manufacturers.		

Exhibit VI.1 – Project Activities and Plans Requirements Response Matrix

Requirement Number	Proposal Volume and Page # Where Response Can Be Found
P1	
P2	
P3	
P4	
P5	
P6	
P7	
P8	
P9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	_
P17	
P18	
P19	
P20	

Exhibit VI.2 – Bidder Proposed Staffing Minimum Qualifications (Requirement P18 Response)

Bidder's Proposed Project Manager

Experience Categories	Description	Minimum Qualifications	Preferred Qualifications
Role	Years performing in same role as that proposed for SOS	At least 6 years, at least 4 years of which have been performing as Project Manager on projects of similar size and complexity.	At least 10 years, at least 6 years of which have been performing as Project Manager on projects of similar size and complexity.
Education & Training	Degrees & Certifications	Project Manager certification OR 4 year degree or higher	Project Manager certification AND 4 year degree or higher

Bidder's Proposed Technical Lead & Programming Lead

Experience Categories	Description	Minimum Qualifications	Preferred Qualifications
Role	Years performing in same role as that proposed for SOS	At least 4 years, at least 2 years of which have been performing in the same role proposed on projects of similar size and complexity.	At least 6 years, at least 4 years of which have been performing in the same role proposed on projects of similar size and complexity.
Education & Training	Degrees & Certifications	2 year degree or higher	4 year degree or higher with appropriate certification in the relevant technologies proposed

Bidder's Proposed Functional (Elections) Lead

Experience Categories	Description	Minimum Qualifications	Preferred Qualifications
Role	Program experience with voter registration and/or elections administration	2 years of direct experience supervising voter registration administration or general election administration in a jurisdiction OR 2 years Project experience with development and implementation of a voter registration system	4 years of direct experience supervising voter registration administration or general election administration in a jurisdiction OR 2 years Project Management experience with development and implementation of a voter registration system
Education & Training	Degrees & Certifications	2 year degree or higher	4 year degree or higher

All Other Key Team Members (Training Lead, Data Conversion Lead, and Testing Lead)

Experience Categories	Description	Minimum Qualifications	Preferred Qualifications
Role	Years performing in same role as that proposed for SOS	At least 4 years, at least 2 years of which have been performing in the same role proposed on projects of similar size and complexity.	At least 4 years of which have been performing in the same role proposed on projects of similar size and complexity.
Education & Training	Degrees & Certifications	2 year degree or higher	4 year degree or higher

Exhibit VI.3 — Bidder Staff Resume in Response to Requirement #P19

Use one form for each Bidder Proposed Staff Member; employment history should start with the most recent employment. Add additional pages as necessary.

Bidder Proposed Staff Name:		Proposed Role:
Individual educational achievements		
Institution Name:	Degree:	Year Graduated:
Certifications Achieved:		
Areas of Professional Expertise:		

Bidder Proposed Staff Name:		Proposed Role:	
Employment History			
Organization Name:		Title and Role:	
Reference Contact Name & Title:		Contact Telephone #:	
Years of Employment:	From:	То:	
Brief description of the activity, job duties	s, and the professional expertise applied:		

Bidder Proposed Staff Name:		Proposed Role:		
Employment History				
Organization Name:		Title and Role:		
Reference Contact Name & Title:		Contact Telephone #:		
Years of Employment:	From:	То:		
Brief description of Job Duties:				

Bidder Proposed Staff Name:		Proposed Role:		
Employment History				
Organization Name:		Title and Role:		
Reference Contact Name & Title:		Contact Telephone #:		
Years of Employment:	From:	То:		
Brief description of Job Duties:				

Exhibit VI.4 - Bidder Estimate of SOS Staffing by Task or Deliverable

NOTE: Exhibit deleted with removal of Requirement P20)

EXHIBIT VI.5 – VOTECAL STANDARD REPORTS

Bidders must provide the following standard reports from the VoteCal System:

1. Voter Registration

- Individual registrant detail:
 - With or without voter participation history;
 - With or without voter activity history; and
 - Audit log of changes to voter record.
- Individual voter affidavit image
- Current and historic registration statistics/counts:
 - By county;
 - By political district (category and individual);
 - By age;
 - By partisan affiliation;
 - By category of UID (i.e., CA DL based, SSN4 based, or generated);
 - By registration status;
 - By registration date;
 - By confidentiality status/type;
 - By vote-by-mail status/type;
 - By language requirements;
 - By accessibility requirements; and
 - By combinations of above.
- Voters with an effective mailing address that cannot be CASS certified
- Current and historic statistics/counts for voters who voted in an election:
 - By county;
 - By political district (category and individual);
 - By age;
 - By partisan affiliation;
 - By registration status;
 - By registration date;
 - By confidentiality status/type;
 - By vote-by-mail status/type;
 - By language requirements;
 - By accessibility requirements;
 - By voting method (i.e., Early, Vote-by-Mail, Polling Place, Provisional); and
 - By combinations of above.
- Vote-by-mail voting status: statistics/counts on vote-by-mail ballot status (e.g., mailed but not returned; returned and counted; rejected by reason):
 - By county;
 - By political district (category and individual);
 - By age;
 - By partisan affiliation;
 - By registration status;
 - By registration date;
 - By confidentiality status/type;
 - By vote-by-mail status/type :
 - By language requirements;
 - By accessibility requirements;

- By voting method (i.e., Early, Vote-by-Mail, Polling Place, Provisional); and
- By combinations of above.
- NVRA report of registration changes for a specified period by source of the registration change
- ROR status report indicating that the counties have completed entry of voter registrations for a specific ROR

2. Investigations

- Voters who have voted more than once in an election
- Voters (by address) when more than "X" voters are registered at the same address
- Voters who are registered at an address designated "commercial" (or non-residential)

3. Political Party

- Political party detail (with or without history)
- Political parties listing (including status and assigned system code)
- Political parties contacts

4. Address – Precinct – District Mapping

- Precincts by district (all or selected districts)
- Districts by precinct (all or selected precincts)
- Orphaned addresses (not assigned to a precinct)
- Orphaned precincts (not assigned to one or more required districts)
- Orphaned districts (no precincts assigned)
- Alias to street name translation
- Street names and associated aliases
- Alias to city name translation
- Cities and associated aliases

5. Voter Registration Processing and List Maintenance

- Detailed listing of unresolved registration issues over "X" days of age:
 - By county; and
 - By type (e.g., data validation error, fatal "pend," potential move out of county, potential duplicate, potential death record match, potential felon match, potential DMV match, potential NCOA match).
- Summary statistics of unresolved registration issues over "X" days of age:
 - By county; and
 - By type (e.g., data validation error, fatal "pend," potential move out of county, potential duplicate, potential death record match, potential felon match, potential DMV match, potential NCOA match).
- Voter registration activity statistics within a specified date range:
 - By county;
 - By type of transaction (e.g., new registration, re-registration within county, re-registration in new county, change of party, cancellation, inactivation, etc.); and
 - By status of transaction (e.g., completed/active, pending).
- Voter registration activity error statistics (error count, resolution time) within a specified date range:
 - By county;
 - By type of transaction (e.g., new registration, re-registration within county, re-registration in new county, change of party, cancellation, inactivation, etc.):
 - By type of error; and
 - By resolution type.

- Voters who have not been mailed a VNC after X days (count by county)
- Statistics/counts on voters mailed a pre-election RCP by county
- Statistics/counts on voters mailed a Change of Address Notification (CAN) by county
- Statistics/counts on voters, by county, who have not voted in "X" years and have not been sent an RCP or an ARCP.
- Listing of voters, by county, who have not voted in "X" years and have not been sent an RCP or an ARCP,
- Statistics/counts by county on voters who have had an "inactive" status and not voted since "X" date.
- Listing of voters, by county, who have had an "inactive" status and not voted since "X" date.
- VoteCal duplicate identification performance statistics (match count, valid match rate, resolution time) within a specified date range:
 - By match criteria;
 - By match status (e.g., not resolved, match confirmed, non-match verified); and
 - By county of residence.
- NCOA performance statistics (match count, valid match rate, resolution time) within a specified date range:
 - By type of notice (e.g., individual, family);
 - By type of move (e.g., in-county, new county, out-of-state, no forwarding address);
 - By match criteria;
 - By match status (e.g., not resolved, match confirmed, non-match verified); and
 - By county of residence.
- DHS Death Record matching performance statistics (match count, valid match rate, resolution time) within a specified date range:
 - By match criteria;
 - By type (i.e., new registration validation versus new death notice against existing registration records);
 - By match status (e.g., not resolved, match confirmed, non-match verified); and
 - By county of residence.
- CDCR felon matching performance statistics (match count, valid match rate, resolution time)
 within a specified date range:
 - By match criteria;
 - By type (*i.e.*, new registration validation versus new felon notice against existing registration records);
 - By match status (e.g., not resolved, match confirmed, non-match verified); and
 - By county of residence.
- DMV Motor Voter performance statistics (match count, valid match rate, resolution time) within a specified date range:
 - By type of transaction (e.g., new registration, in-county move, move between counties);
 - By match criteria;
 - By match status (e.g., not resolved, match confirmed, non-match verified); and
 - By county of residence.
- DMV ID verification performance statistics (match counts, valid match rate, turnaround time):
 - By type of verification requested (*i.e.*, CA DL, SSN4, no ID);
 - By type of verification response; and
 - By county of residence.

6. Election Management

- List of elections defined in system (including status, election date and assigned codes)
- Detailed definition of individual election (all associated data, for proofing)
- List of defined voting precincts and associated voter registration counts for a specific election:
 - By county;
 - By political district;
 - By political party affiliation; and
 - By registration status (e.g., active, inactive, vote-by-mail, permanent vote-by-mail, early voted.
- List of rosters not printed for a specific election:
 - By county; and
 - By voting precinct.
- Summary statistics of roster printing for an election:
 - By county;
 - By date printed; and
 - By roster type (e.g., active voters, inactive voters, supplemental).
- Voter Turnout in a specific election:
 - By county;
 - By political district;
 - By age;
 - By partisan affiliation;
 - · By language preference; and
 - By type of participation (i.e., vote-by-mail/mail, early, in-polling place, provisional).

7. Report of Registration (covered in ROR section – business requirement S24)

8. Voter Information Guide (VIG) Mailing

- Summary statistics of voters selected for mailing:
 - By county; and
 - By language selected.
- Summary statistics of "householded" mailing addresses generated/extracted:
 - By county; and
 - By language selected.
- Summary statistics of eligible voters not selected or rejected:
 - By county; and
 - By reason (e.g., invalid mailing address, out-of-state mailing address)

9. Public Requests for Voter Registration Data

- List of all applications/requests for voter registration data (including date requested, applicant, and status of application):
 - By date range of application;
 - By date range of fulfillment or denial;
 - By status (i.e., pending, fulfilled, denied);
 - By applicant;
 - By basis for qualification (e.g., political party, candidate, journalist); and
 - By type of data requested.
- Individual PRVRD detail, including investigation log, data requested and salted registration records
- Listing or index of PRVRD and salted registration records

10. Jury Wheel Extracts

- List of all applications/requests for jury wheel extracts (including date requested, applicant, and status of application):
 - By date range of application;
 - By date range of fulfillment;
 - By status (i.e., pending, fulfilled, denied); and
 - By applicant.
- Individual jury wheel request detail, including requestor information and data requested.

11. Security

- List of all system user accounts and roles assigned:
 - By agency;
 - By role;
 - By user; and
 - By age.
- System audit log:
 - By date (or date range);
 - By type of activity; and
 - By user.

EXHIBIT VI.6 – VOTECAL EMS STANDARD REPORTS

1. Voter Registration

- Individual registrant detail:
 - With or without voter participation history;
 - With or without voter activity history; and
 - With or without audit log of changes to the voter record.
- Individual voter affidavit image
- List of voters without an image attached to the voter record (affidavit or signature)
- List of registered voters and registration data, filtered or sorted:
 - o By political district (category and individual);
 - By home and voting precinct;
 - By date of birth (range or comparison);
 - By partisan affiliation;
 - o By category of UID (i.e., CA DL based, SSN4 based, or generated);
 - o By registration status;
 - By registration date;
 - By confidentiality status/type;
 - By vote-by-mail status/type;
 - By language requirements;
 - o By accessibility requirements; and
 - o By combinations of above.
- Mailing labels and postcards of registered voters, optionally ordered by USPS Carrier Route, filtered or sorted:
 - By political district (category and individual);
 - By home and voting precinct;
 - o By date of birth (range or comparison);
 - By partisan affiliation;
 - o By category of UID (i.e., CA DL based, SSN4 based, or generated);
 - By registration status;
 - By registration date;
 - By confidentiality status/type;
 - By vote-by-mail status/type;
 - By language requirements;
 - By accessibility requirements; and
 - By combinations of above.
- Current and historic registration statistics/counts, filtered or sorted:
 - o By political district (category and individual);
 - By home and voting precinct;
 - o By Date of Birth (range or comparison);
 - o By partisan affiliation;
 - o By category of UID (i.e., CA DL based, SSN4 based, or generated);
 - By registration status;
 - By registration date;
 - By confidentiality status/type;
 - By vote-by-mail status/type;
 - o By language requirements;
 - By accessibility requirements; and

- By combinations of above.
- Registration counts broken down by political districts filtered and/or sorted:
 - o By political district; and
 - o By partisan affiliation.
- Voters with an effective mailing address that cannot be CASS certified
- Current and historic statistics/counts for voters who voted in an election, filtered or sorted:
 - By political district (category and individual);
 - By home and voting precinct;
 - By date of birth (range or comparison);
 - By partisan affiliation;
 - By registration status;
 - By registration date;
 - By confidentiality status/type;
 - By vote-by-mail status/type;
 - By language requirements;
 - By accessibility requirements;
 - By voting method (i.e., early, vote-by-mail, polling place, provisional);
 and
 - By combinations of above.
- Precinct walking lists of registered voters (i.e., registered voters ordered by address), filtered and/or sorted:
 - o By political district;
 - o By home precinct;
 - By voting precinct;
 - o By language preference; and
 - o By partisan affiliation.

2. Address/Street Index

- Listing of street and address ranges (including status and assigned home precinct):
- By street name; and
 - o By status (e.g., residential, commercial, multi-family).
 - By jurisdiction;
 - o By home and voting precinct.
- Index listing of street names and associated aliases:
 - o By street name; and
 - o By alias.
 - By jurisdiction;
 - By home and voting precinct.
- Index listing of city names and associated aliases:
 - o By city name;
 - o By alias:
 - o By jurisdiction; and
 - By home and voting precinct.
- Listing of orphaned street and address ranges that have not been assigned a home precinct

3. Precinct - District Mapping

- Index listing of individual or all political districts and assigned home precincts, sorted by jurisdiction type and actual district, including (at user option) voter count, broken down by:
 - Active/Inactive status
 - o Permanent Vote-by-Mail status (including overseas voters)
 - o Language preference
 - Political party affiliation
- Index listing of individual or all home precincts and associated political districts by precinct, including (at user option) voter count, broken down by:
 - Active/Inactive status
 - o Permanent Vote-by-Mail status (including overseas voters)
 - o Language preference
 - o Political party affiliation
- Index listing of home precincts and associated street & address ranges, filtered and/or sorted by:
 - o Home precinct;
 - o Political district;
 - o City; and
 - o Zip code.
- Index listing of street & address ranges and associated home precincts, filtered and/or sorted by:
 - Home precinct;
 - Political district;
 - o City; and
 - o Zip code.
- Index listing of political districts and associated street & address ranges, filtered and sorted by:
 - Home precinct;
 - o Political district;
 - o City; and
 - o Zip code.
- Index listing of street & address ranges and associated political districts, filtered and/or sorted by:
 - Home precinct;
 - o Political district;
 - o City; and
 - o Zip code.
- Street and address range detail listing, filtered and/or sorted by:
 - o Address type (e.g., residential, commercial, multi-family, etc.);
 - Status (e.g., active, inactive);
 - o City; and
 - o Zip code
- Overlapping street range analysis report;
- Listing of changes to street and address data within a specified period of time

- Listing of orphaned home precincts that have not been assigned required political districts:
 - o By home precinct; and
 - o By district type.
- Listing of orphaned political districts that have not been assigned home precincts
- Precinct voter registration counts, filtered and/or sorted:
 - By precinct;
 - o By political district
 - By registration status;
 - By partisan affiliation;
 - o By vote-by-mail status;
 - o By language requirements; and
 - By accessibility requirements.
- Listing of re-precincted voters within a specified period of time

4. Registration Processing and List Maintenance

- Daily log of voter registration activity, optionally filtered and/or sorted:
 - By type of activity;
 - By source of change (e.g., county input, DMV, VoteCal duplicate processing, etc.); and
 - By staff person who input the change.
- Detailed listing of unresolved registration issues, filtered or sorted:
 - By type (e.g., data validation error, fatal "pending," potential move out of county, potential duplicate, potential death record match, potential felon match, potential DMV match, potential NCOA match;
 - o By source: and
 - o By date of birth (comparison or range).
 - By date range of voter activity
- Summary statistics of registration changes made within a specified period, filtered or sorted:
 - o By source:
 - By type of change; and
 - By date range of voter activity.
- Detailed listing of voters selected for an RCP mailing and the specific results for each voter from that mailing
- Summary statistics of voters selected for an RCP mailing and the specific results for each voter from that mailing
- Detailed listing of voters selected for an ARCP mailing and the specific results for each voter from that mailing
- Summary statistics of voters selected for an ARCP mailing and the specific results for each voter from that mailing
- Detailed listing of voters selected for a CAN mailing and the specific results for each voter from that mailing
- Summary statistics of voters selected for a CAN mailing and the specific results for each voter from that mailing

- Detailed listing of voters mailed an NVRA 8(d)(2) notice within a specified time period and the specific results for each voter from that mailing
- Summary statistics of voters mailed an NVRA 8(d)(2) notice within a specified time period and the specific results for each voter from that mailing
- NVRA reporting statistics of registration activity and source within a specified time period

5. Election Management – Election Definition

- Election definition detail for a specific election
- Listing of defined elections within the system, including the type and status of each election
- Detailed listing of template offices defined within the system, filtered or sorted:
 - By political district; and
 - o By type.
- Template office definition detail for a specific elected office in the "template"
- Listing of Contests defined for a specific election, filtered or sorted:
 - o By political district;
 - o By office type; and
 - o By contest type (e.g., ballot measure, partisan nomination, etc.).

6. Election Management – Candidate Management

- Individual candidate detail, including qualification status with or without qualification details (e.g., document filing, petition signatures gathered and validated, signatures in-lieu filed and validated, filing fees paid, etc.)
- Candidate mailing labels, filtered and/or sorted:
 - o By contest; and
 - By partisan affiliation;
- Summary listing of candidates for a specific election and the status of each, filtered or sorted:
 - o By contest:
 - o By partisan affiliation; and
 - By qualification status.
- Summary listing of filing fees collected for a specific election
- Historical listing for an individual of the elections and contests in which that individual was a candidate
- Listing of current and, optionally, historic office holders, filtered and/or sorted:
 - By political district;
 - o By office; and
 - o By date elected.

7. Election Management – Ballot Definition

 Detailed listing of individual ballot style(s) (all contests and candidates) by applicable ballot rotation.

- Index listing of voting precincts and ballot styles (voting precinct to ballot style, and ballot style to voting precinct), filtered or sorted:
 - By political district; and
 - By partisan affiliation.

8. Election Management – Voting Precinct and Polling Places

- Voter count by voting precinct, broken down:
 - By partisan affiliation;
 - o By registration status; and
 - o By vote-by-mail voter status.
- Index listing of home precincts and associated voting precincts
- Index listing of voting precincts and associated home precincts
- Index listing of voting precincts and associated political districts
- Index listing of political districts and associated voting precincts
- Index listing of voting precincts and designated polling places
- Index listing polling places and assigned voting precincts
- Detail report of individual polling place:
 - With or without staff assigned (including partisan affiliation and staff role); and
 - o With or without photos.
- Index listing of polling places and ballot styles
- Listing of eligible polling places, filtered and/or sorted by political district
- Listing of polling places and accessibility features
- Listing of polling places and contact numbers
- List of eligible voters with respect to a specific election, filtered and/or sorted:
 - By voting precinct;
 - By political district;
 - By partisan affiliation;
 - o By voter status; and
 - o By mail ballot status.
- Mailing labels for eligible voters with respect to a specific election, filtered and/or sorted:
 - By voting precinct;
 - o By political district;
 - By partisan affiliation;
 - o By voter status; and
 - By mail ballot status.

9. Election Management - Election Worker Management

- Detail report of individual election worker with or without history
- Listing of Election workers and contact information, filtered or sorted:
 - By worker name;
 - By assigned role for a particular election; and

- By assigned polling place for a particular election.
- Election worker mailing labels, filtered and/or sorted:
 - o By assigned role for a particular election; and
 - o By assigned polling place for a particular election.
- Listing of election workers and participation in training, filtered or sorted:
 - By training classes (individual or category); and
 - o By name.
- Listing of election workers and alternative language capability, filtered or sorted:
 - o By language; and
 - By assigned polling place.
- Changes to voter registration for voters who are poll workers
- Election worker payroll, filtered, grouped and/or sorted:
 - o By assigned roll; and
 - o By assigned polling place

10. (Vote-by-Mail) Mail Voting Management

- Listing of permanent mail ballot voters (e.g., permanent vote-by-mail, overseas, etc.) including mailing address, and expiration date, filtered and/or sorted:
 - o By voter name;
 - By voter mailing address;
 - By vote-by-mail/mail ballot category (e.g., military/overseas, vote-by-mail, permanent vote-by-mail, all mail precinct); and
 - By expiration date (if any).
- Summary statistics (counts) of permanent mail ballot voters (e.g., permanent vote-by-mail, overseas, confidential, etc.), filtered and/or sorted:
 - By political districts;
 - o By voting precinct; and
 - By category of mail voter (e.g., permanent vote-by-mail, overseas, confidential, etc.).
- Listing of mail ballot voters with respect to a particular election, including mailing address and ballot style) filtered and/or sorted:
 - By voter name;
 - By voter mailing address;
 - By vote-by-mail/mail ballot category (e.g., military/overseas, vote-by-mail, permanent vote-by-mail, all mail precinct);
 - o By voting precinct;
 - By ballot mailing date;
 - o By date ballot received; and
 - By ballot status.
- Summary statistics (counts) of mail ballots with respect to a particular election, filtered and/or sorted:
 - By political districts;
 - o By voting precinct;
 - By party of ballot sent/requested (primary only);
 - By ballot mailing date;
 - By date ballot received; and

- By ballot status.
- Listing and summary counts of rejected mail ballots with respect to a particular election and reason for the rejection, filtered and/or sorted:
 - o By voter name;
 - o By return method;
 - o By rejection reason;
 - By partisan affiliation;
 - o By political district; and
 - By date of return.

11. Provisional Ballot Tracking

- Listing of provisional ballot voters, the status of the ballot, and rejection reason (if any), sorted or filtered:
 - By provisional ballot number;
 - o By voter name;
 - o By partisan affiliation;
 - o By voting precinct or polling place where issued;
 - o By ballot status (i.e., pending, counted, rejected); and
 - o By ballot style.

12. Petition Management

- Detail report of individual Petition and configuration data
- With or without signature summary statistics
- Listing of petitions for a specific election and the status of each (including signature counts), filtered and sorted by:
 - o By petition type;
 - o By candidate or ballot measure name;
 - o By political jurisdiction; and
 - By petition status.
- Listing of signatures verified for a petition and the status of each (including rejection reason, if any), filtered and sorted by:
 - By page/part number;
 - By signature number or line number;
 - By voter name;
 - o By signature status; and
 - o By rejection reason.

Exhibit VI.7 – VoteCal System One-Time Hardware List

Instructions

This information table must contain the Bidder's list for all hardware items proposed for the VoteCal System, whether located at SOS, the State co-location facility, or in county offices. The Bidder must describe all required hardware, including quantity, manufacturer, brand name, and model number.

COLUMN HEADING	INFORMATION TO BE ENTERED IN THAT COLUMN
Item #	Do not enter – already in information table
Phase Name for Hardware Install	Enter the project Phase name when the hardware will be installed (should match the deliverable in the Bidder's Project Schedule) including quantity, manufacturer, brand name, and model number.
Equipment Description	Enter a description of the equipment (hardware and associated operating system software) that is required for the proposed solution including quantity, manufacturer, brand name, and model number.
# of this Item Required	Enter the quantity of the specific hardware item required for the proposed solution.

Exhibit VI.7—VoteCal System One-Time Hardware List – Use additional pages if necessary

Hardware List Page: _____

	Haluware List rage.		
Item #	Phase Name for Hardware Install	Equipment Description	# of this Item Required
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Exhibit VI.8 – VoteCal System List of One-Time Platform Software To Be Purchased Or Licensed

Instructions

This information table must include the list of all platform products that will be used in the development, implementation, or management of the proposed solution. The Software List should include all the commercial (off-the-shelf) application software module licenses for the Bidder's proposed solution (if applicable) and any required third-party products necessary for a successful implementation.

Examples of platform software include operating systems, database management systems, language interpreters, assemblers and compilers, communications software, backup and archive, utilities and security, performance analyzers and monitors, and other essential system software.

COLUMN HEADING	INFORMATION TO BE ENTERED IN THAT COLUMN
Item #	Do not enter – already in information table
Description of the Software	Enter the description of the item being proposed. Use a separate line for each software item. Use additional pages if necessary. Include in the description of the model or version/release number, and a detailed description of specifications, application licenses, etc.
Part/Module #, Version # or Name	Enter the part number, module number, version # or name of the item being proposed.
# of this Item Required	Enter the quantity of this item required.

Exhibit VI.8—VoteCal System List of One-Time Platform Software To Be Purchased Or Licensed – Use additional pages if necessary

Platform Software List Page: _____

		Flationii Soltware List Fage.	# -6 41-1-
Item #	Description of Software	Part/Module #, Version # or Name	# of this Item Required
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
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25			

Exhibit VI.9 – Optional VoteCal EMS System (Centralized Solution) One-Time Hardware List

Instructions

This information table must contain the Bidder's list for all additional hardware items proposed for the optional EMS central system. The Bidder must describe all required hardware, including quantity, manufacturer, brand name, and model number.

<u> </u>	
COLUMN HEADING	INFORMATION TO BE ENTERED IN THAT COLUMN
Item #	Do not enter – already in information table
Project Phase for Install	Enter the project Phase name when the hardware will be installed (should match the deliverable in the Bidder's Project Schedule) including quantity, manufacturer, brand name, and model number.
Equipment Description	Enter a description of the equipment (hardware and associated operating system software) that is required for the proposed solution including quantity, manufacturer, brand name, and model number.
# of This Item Required	Enter the quantity of the specific hardware item required for the proposed solution.

Exhibit VI.9—Optional VoteCal EMS System (Centralized Solution) One-Time Hardware List Use additional pages if necessary

Item #	Project Phase for Install	Equipment Description	# of This Item Required
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Exhibit VI.10(a-f) – Optional VoteCal EMS One-Time County Hardware Lists By Tier

Instructions

These information tables must contain the Bidder's list for all hardware items proposed for counties for the optional EMS system (if any). The Bidder must describe all required hardware, including quantity, manufacturer, brand name, and model number. Separate Lists have been provided for each Tier Level.

COLUMN HEADING	INFORMATION TO BE ENTERED IN THAT COLUMN
Item #	Do not enter – already in information table
Project Phase for Install	Enter the project Phase name when the hardware will be installed (should match the deliverable in the Bidder's Project Schedule) including quantity, manufacturer, brand name, and model number.
Equipment Description	Enter a description of the equipment (hardware and associated operating system software) that is required for the proposed solution including quantity, manufacturer, brand name, and model number.
# of This Item Required	Enter the quantity of the specific hardware item required for the proposed solution.

Exhibit VI.10a - Optional VoteCal EMS One-Time County Hardware List – TIER 1 (Under 15,000 Voters)

Use more pages if necessary.

Optional Vote	Optional VoteCal EMS – TIER 1 County One-Time Hardware List Page #:				
Item #	Project Phase for Install	Equipment Description	# of This Item Required		
1			-		
2					
3					

4		
5		
6		
7		
8		
9		
10		

Exhibit VI.10b - Optional VoteCal EMS One-Time County Hardware List - TIER 2 (15,001 - 50,000 Voters)

Optional VoteCa	Optional VoteCal EMS - TIER 2 County One-Time Hardware List Page #:				
Item #	Project Phase for Install	Equipment Description	# of This Item Required		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Exhibit VI.10c - Optional VoteCal EMS One-Time County Hardware List - TIER 3 (50,001 - 200,000 Voters)

Optional VoteCal EMS - TIER 3 County One-Time Hardware List Page #:				
Item #	Project Phase for Install	Equipment Description	# of This Item Required	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Exhibit VI.10d - Optional VoteCal EMS One-Time County Hardware List - TIER 4 (200,001 - 1 Million Voters)

Optional VoteCa	Optional VoteCal EMS - TIER 4 County One-Time Hardware List Page #:				
Item #	Project Phase for Install	Equipment Description	# of This Item Required		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Exhibit VI.10e – Optional VoteCal EMS One-Time County Hardware List – TIER 5 (1 Million – 3 Million Voters)

Optional Vote	Optional VoteCal EMS - TIER 5 County One-Time Hardware List Page #:				
Item #	Project Phase for Install	Equipment Description	# of This Item Required		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Exhibit VI.10f – Optional VoteCal EMS One-Time County Hardware List – TIER 6 (Over 3 Million Voters)

Optional Vote	Optional VoteCal EMS - TIER 6 County One-Time Hardware List Page #:				
Item #	Project Phase for Install	Equipment Description	# of This Item Required		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Exhibit VI.11 – List of Optional VoteCal EMS System (centralized solution) One-Time Platform Software To Be Purchased or Licensed

Instructions

This information table must include the one-time list of any platform software products that will be used in the development, implementation, or management of the proposed EMS solution (if any). The Software List must include all platform software products necessary for a successful implementation *over and above* software needed for the VoteCal (Voter Registration) core system.

Examples of platform software include operating systems, database management systems, language interpreters, assemblers and compilers, communications software, backup and archive, utilities and security, performance analyzers and monitors, and other essential system software.

COLUMN HEADING	INFORMATION TO BE ENTERED IN THAT COLUMN
Item #	Do not enter – already in information table
Description of the Software	Enter the description of the item being proposed. Use a separate line for each software item. Use additional pages if necessary. Include in the description of the model or version/release number, and a detailed description of specifications, application licenses, etc.
Part/Module #, Version # or Name	Enter the part number, module number, version # or name of the item being proposed.
# of This Item Required	Enter the quantity of this item required.

., ,,	D 1 1 1 0 1		# of This
Item #	Description of the Software	Part/Module #, Version #, or Name	Item Required
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Exhibit VI.12(a-f) - Optional VoteCal EMS One-Time County Platform Software To Be Purchased Or Licensed By Tier

Instructions

These information tables must include the one-time list of all platform software products for Counties that will be used in the development, implementation, or management of the proposed EMS solution (*if any*). The Software List must include all platform software products necessary for a successful implementation over and above software needed for the VoteCal (Voter Registration) core system. Separate Lists have been provided for each Tier Level.

Examples of platform software include operating systems, database management systems, language interpreters, assemblers and compilers, communications software, backup and archive, utilities and security, performance analyzers and monitors, and other essential system software.

COLUMN HEADING	INFORMATION TO BE ENTERED IN THAT COLUMN
Item #	Do not enter – already in information table
Description of the Software	Enter the description of the item being proposed. Use a separate line for each software item. Use additional pages if necessary. Include in the description of the model or version/release number, and a detailed description of specifications, application licenses, etc.
Part/Module #, Version # or Name	Enter the part number, module number, version # or name of the item being proposed.
# of This Item Required	Enter the quantity of this item required.

Exhibit VI.12a – Optional VoteCal EMS One-Time County Platform Software List – TIER 1 (Under 15,000 Voters)

			# of This
Item #	Description of the Software	Part/Module #, Version #, or Name	Item Required
1			-
2			
3			
4			
5			
6			
7			
8			
9			
10			

Exhibit VI.12b - Optional VoteCal EMS One-Time County Platform Software List - TIER 2 (15,001 - 50,000 Voters)

Optional Vote	Optional VoteCal EMS - TIER 2 County One-Time Platform Software List Page #:				
Item #	Description of the Software	Part/Module #, Version #, or Name	# of This Item Required		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Exhibit VI.12c - Optional VoteCal EMS One-Time County Platform Software List - TIER 3 (50,001 - 200,000 Voters)

Optional Vote	ptional VoteCal EMS - TIER 3 County One-Time Platform Software List Page #:				
Item #	Description of the Software	Part/Module #, Version #, or Name			
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Exhibit VI.12d - Optional VoteCal EMS One-Time County Platform Software List - TIER 4 (200,001 - 1 Million Voters)

Optional VoteO	Optional VoteCal EMS - TIER 4 County One-Time Platform Software List Page #:			
Item #	Description of the Software	Part/Module #, Version #, or Name	# of This Item Required	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Exhibit VI.12e - Optional VoteCal EMS One-Time County Platform Software List - TIER 5 (1 Million - 3 Million Voters)

Optional VoteO	Optional VoteCal EMS - TIER 5 County One-Time Platform Software List Page #:				
Item #	Description of the Software	Part/Module #, Version #, or Name	# of This Item Required		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Exhibit VI.12f - Optional VoteCal EMS One-Time County Platform Software List – TIER 6 (Over 3 Million Voters)

Item #	Description of the Software	Part/Module #, Version #, or Name	# of This
			Required
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			